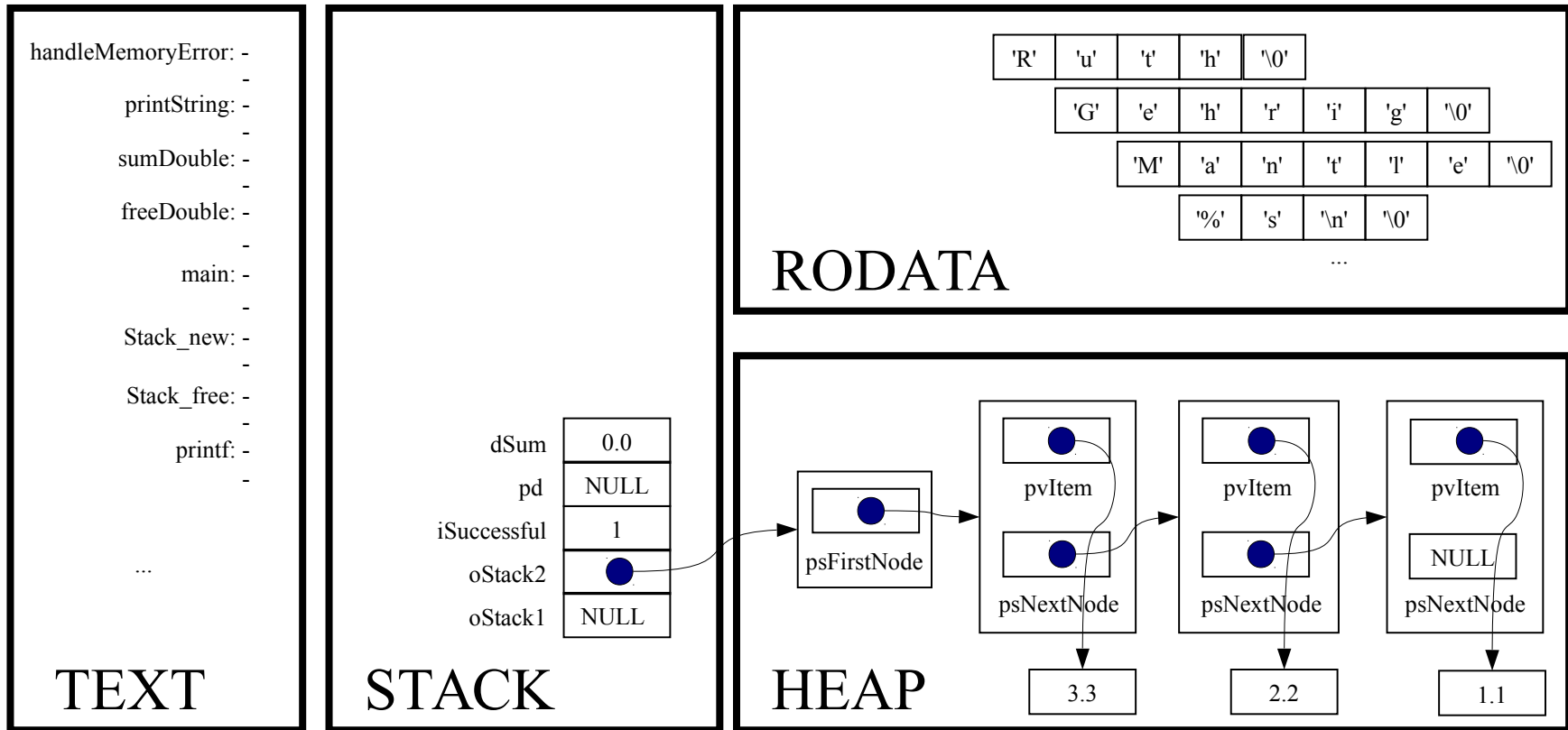


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Fast forward...

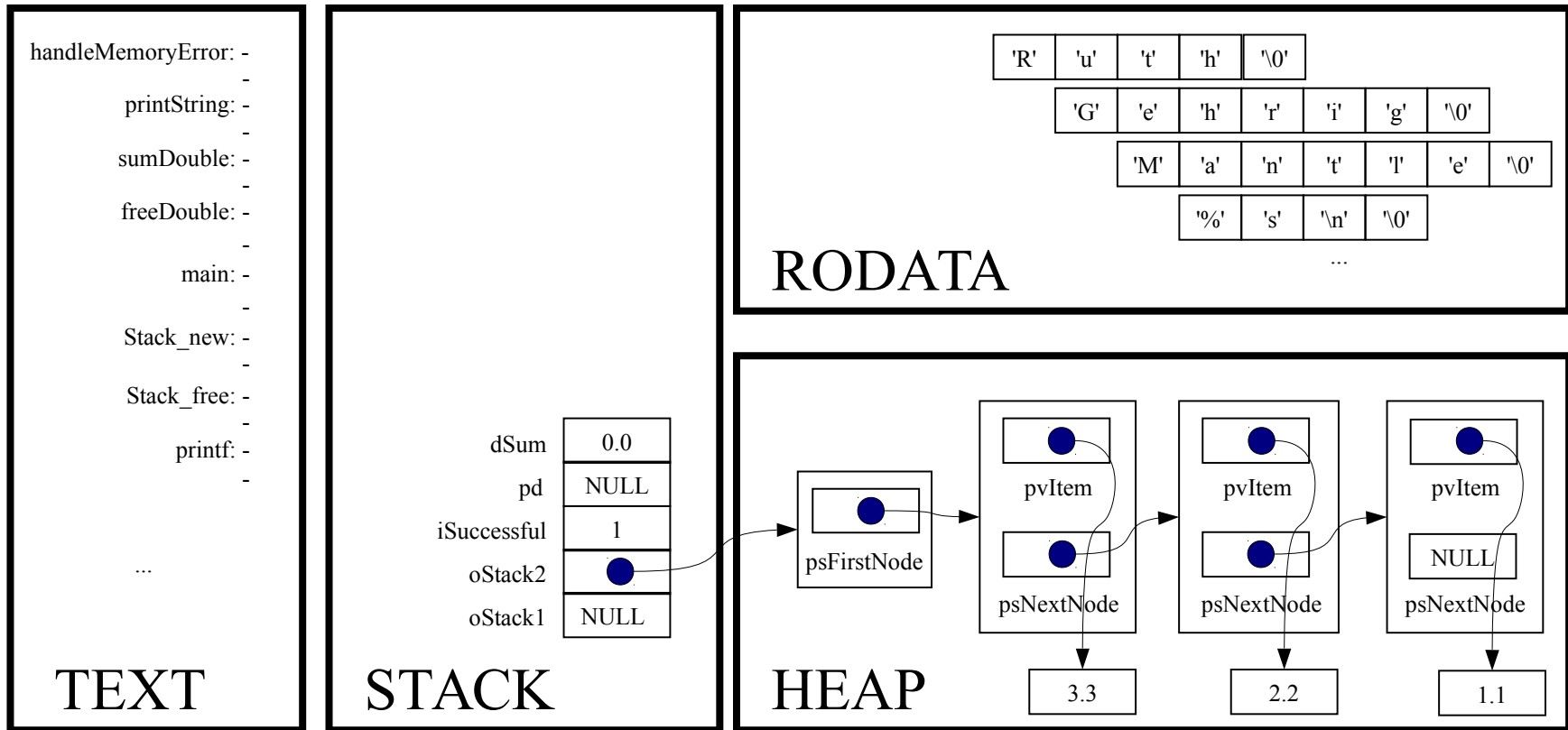
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Immediately before the main() function's second call of Stack_map():



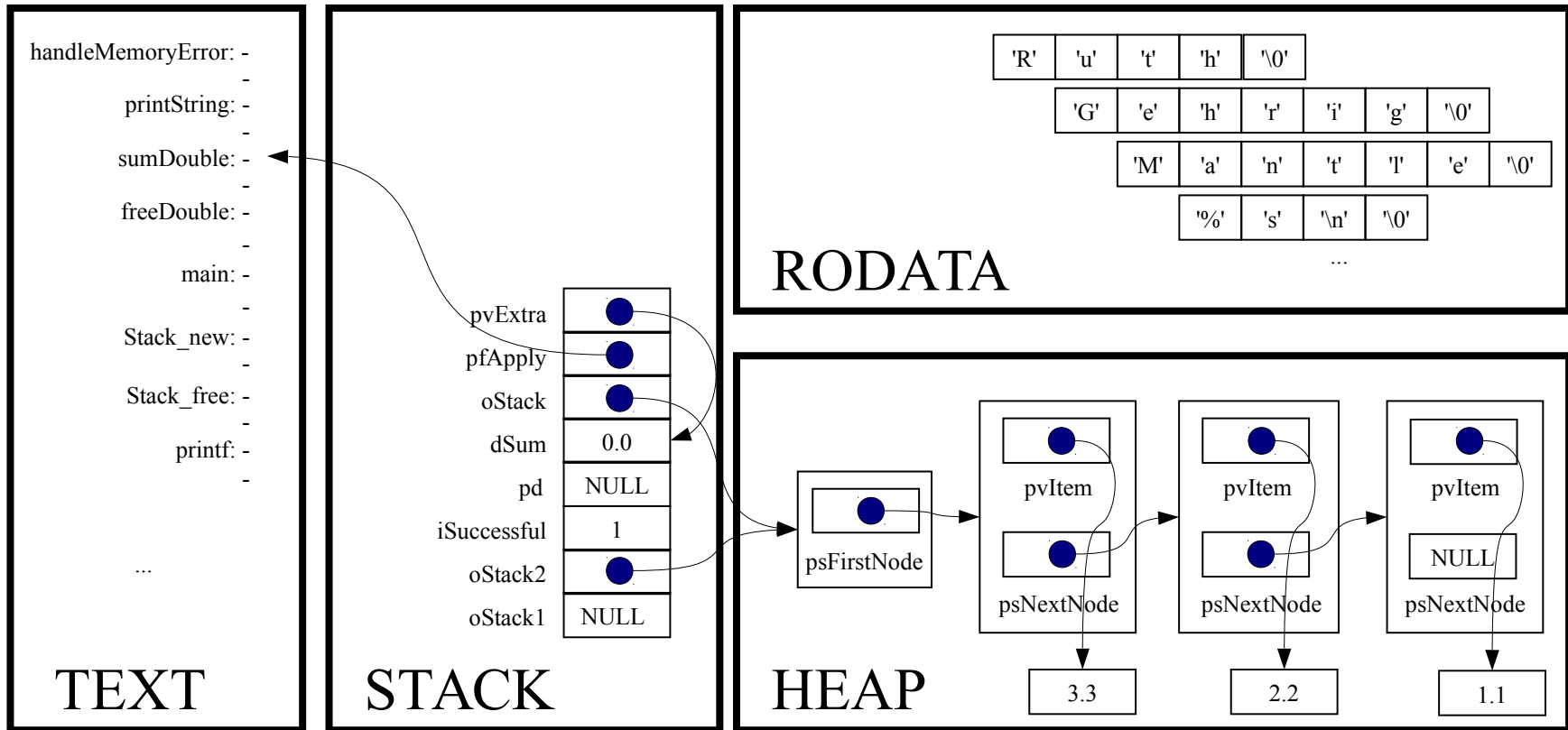
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```
Stack_map(oStack2, sumDouble, &dSum);
```



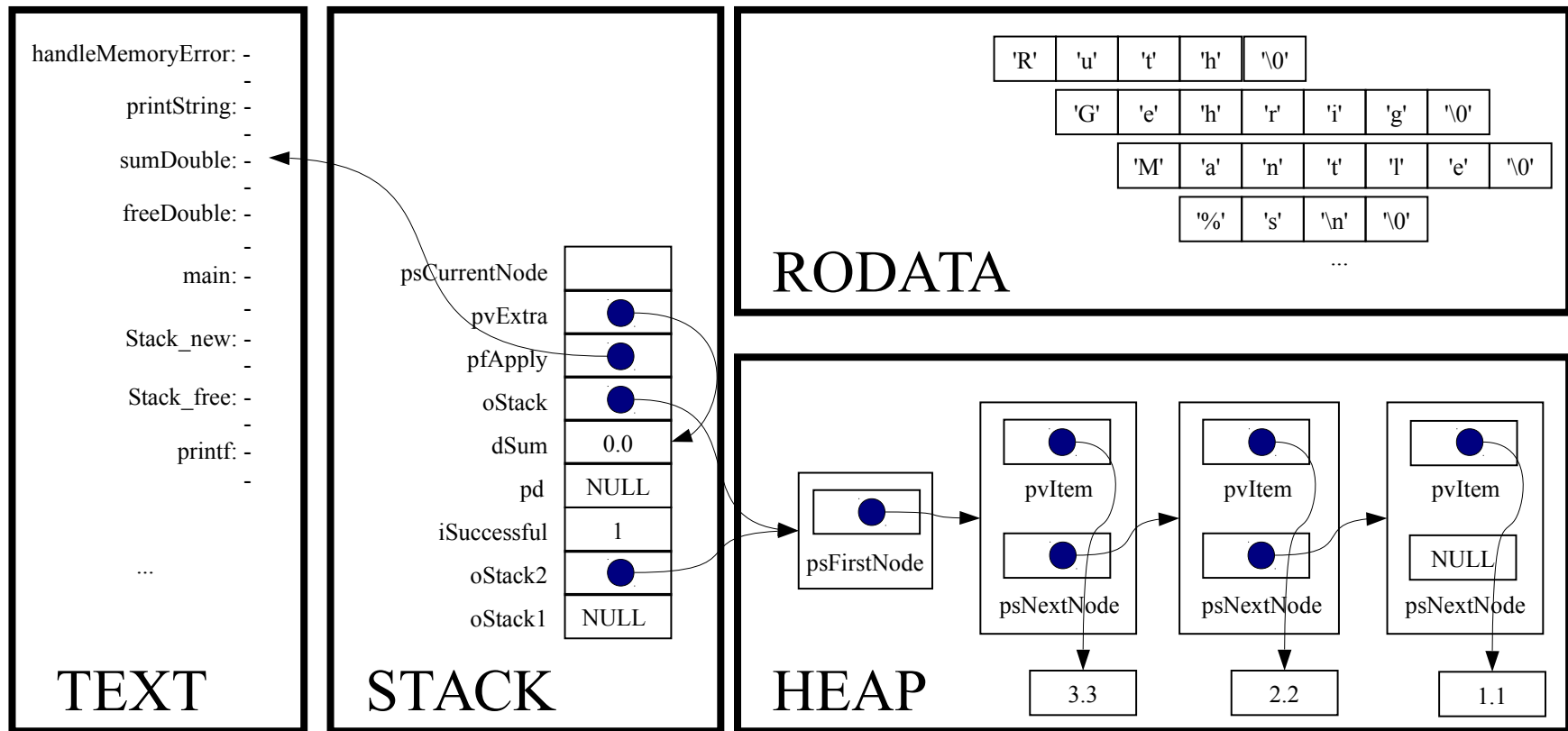
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```
void Stack_map(Stack_T oStack,
              void (*pfApply)(void *pvItem, void *pvExtra),
              const void *pvExtra)
```



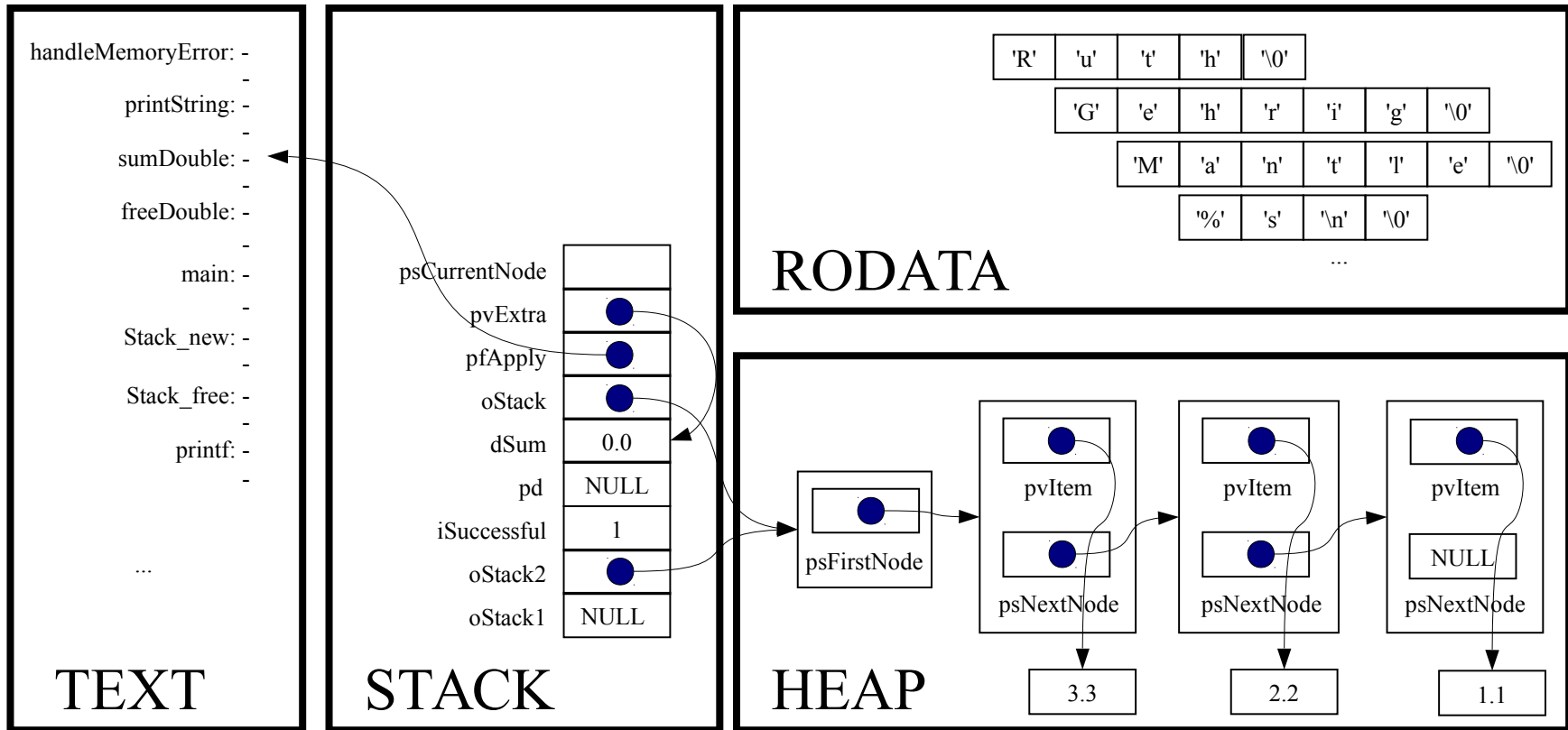
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```
struct StackNode *psCurrentNode;
```



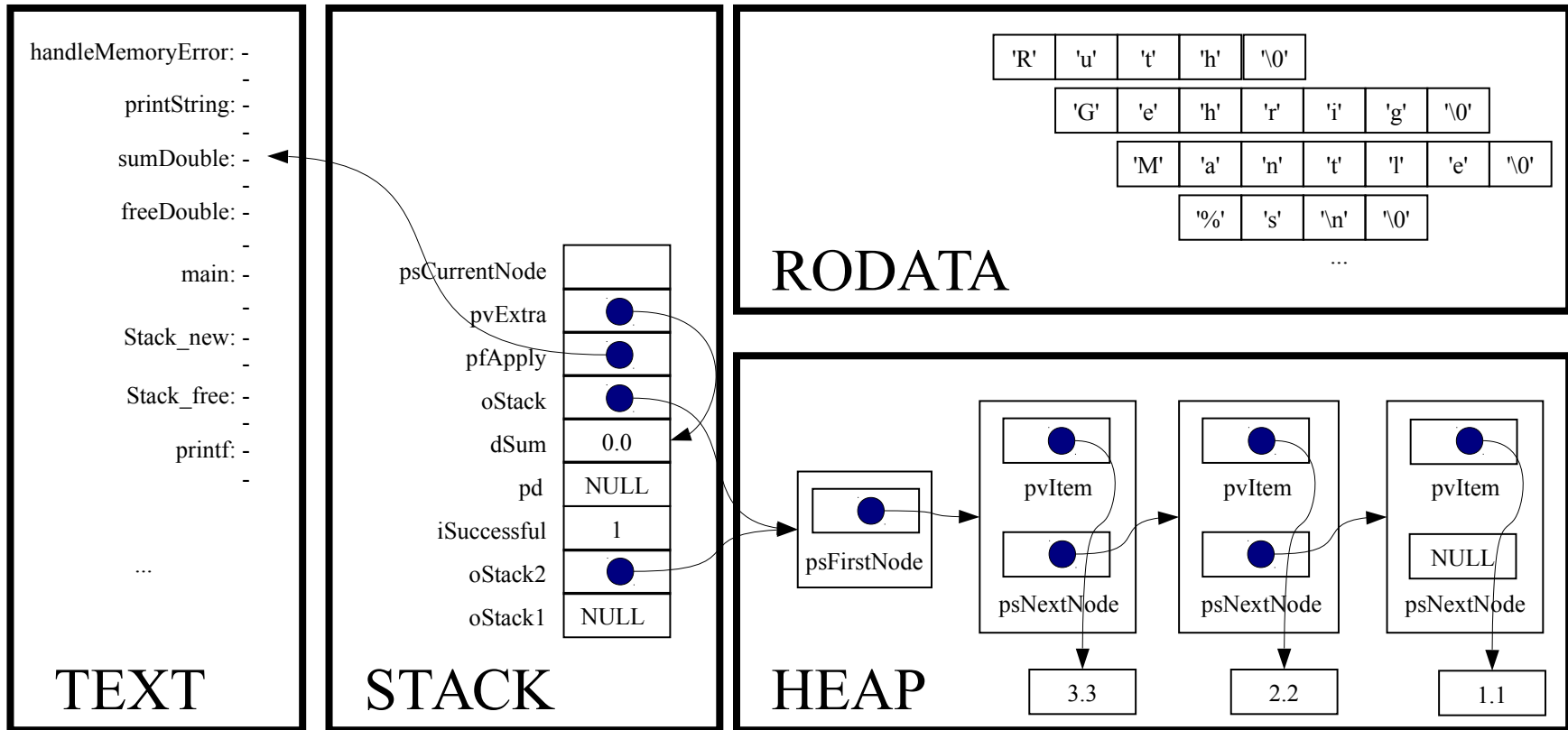
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```
assert(oStack != NULL);
```



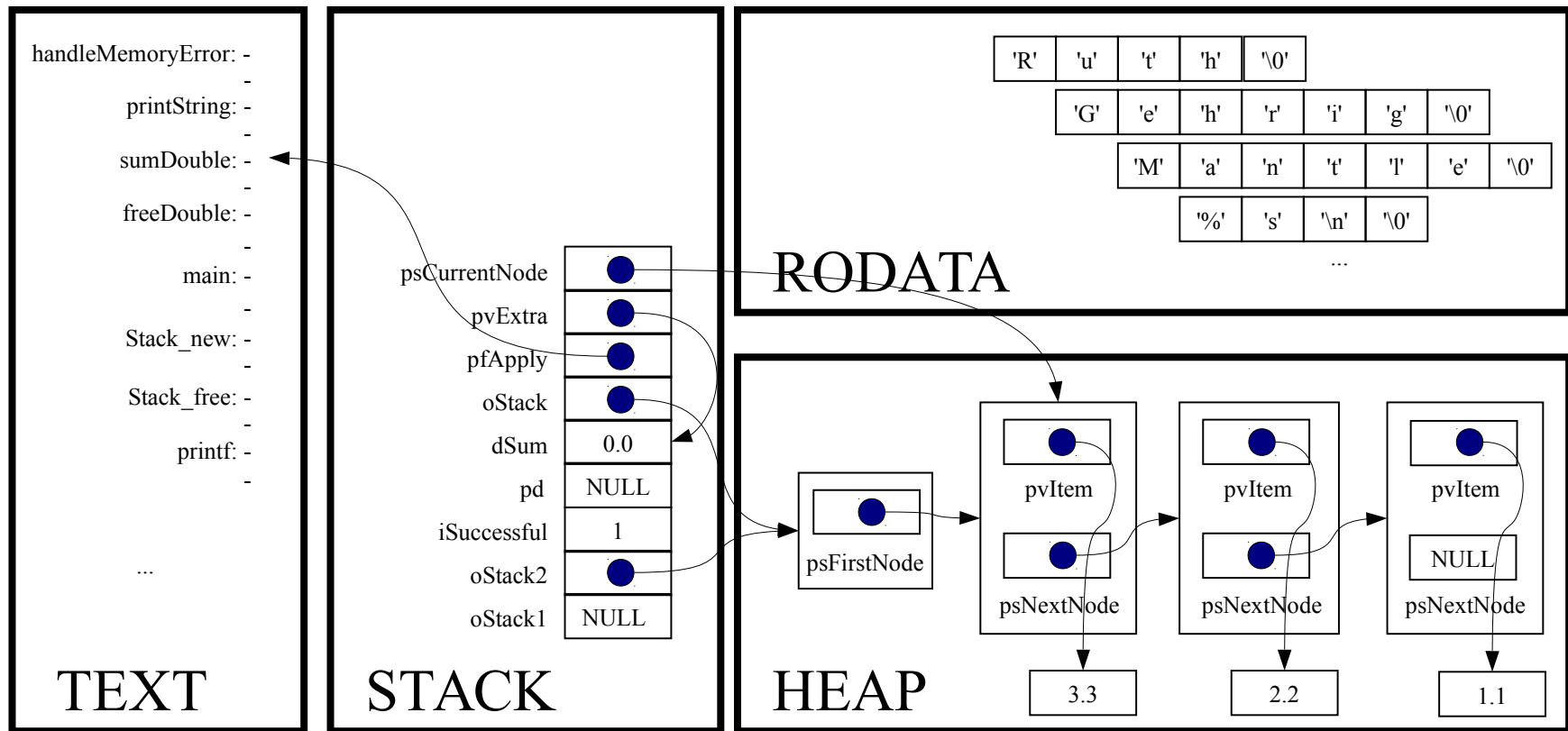
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```
assert(pfApply != NULL);
```



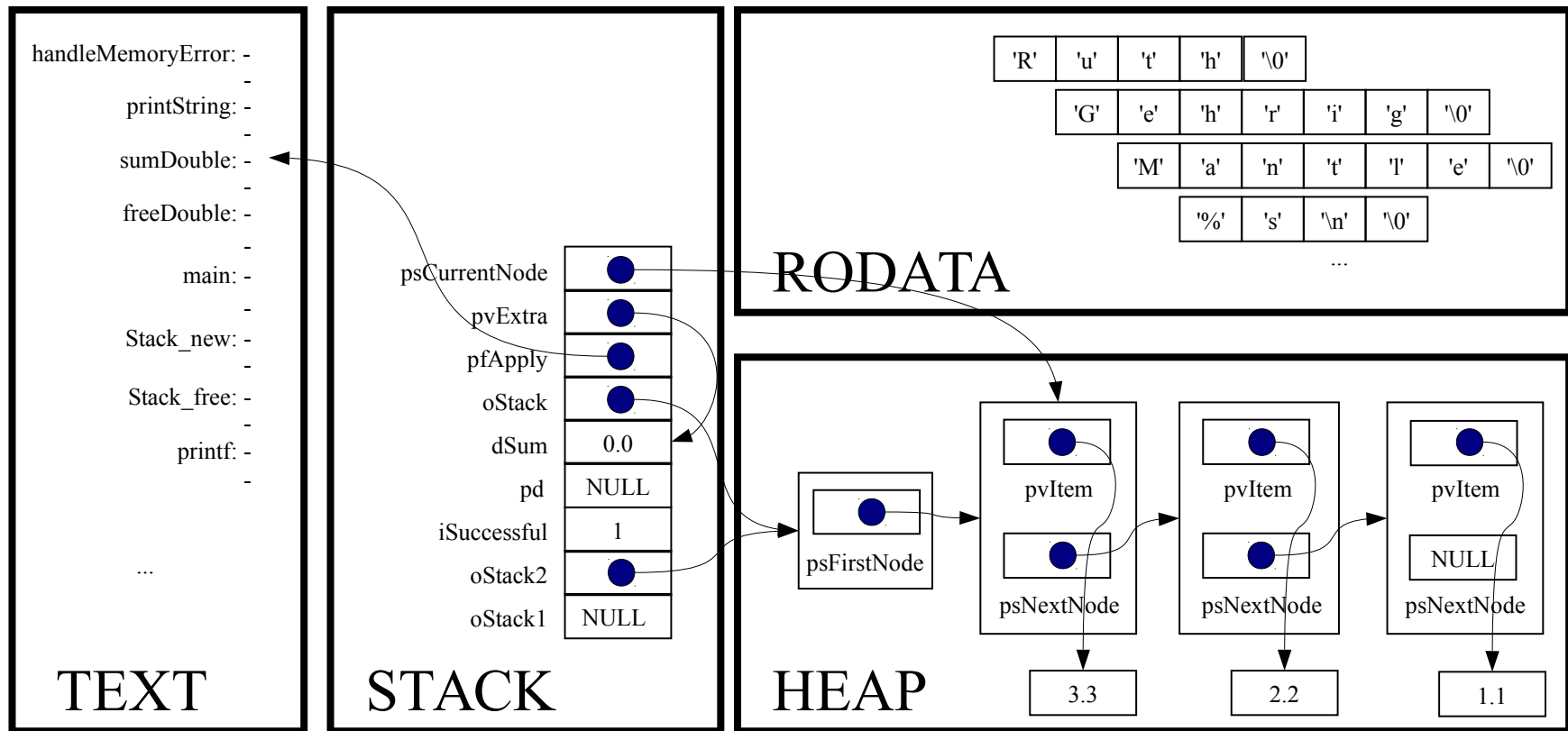
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



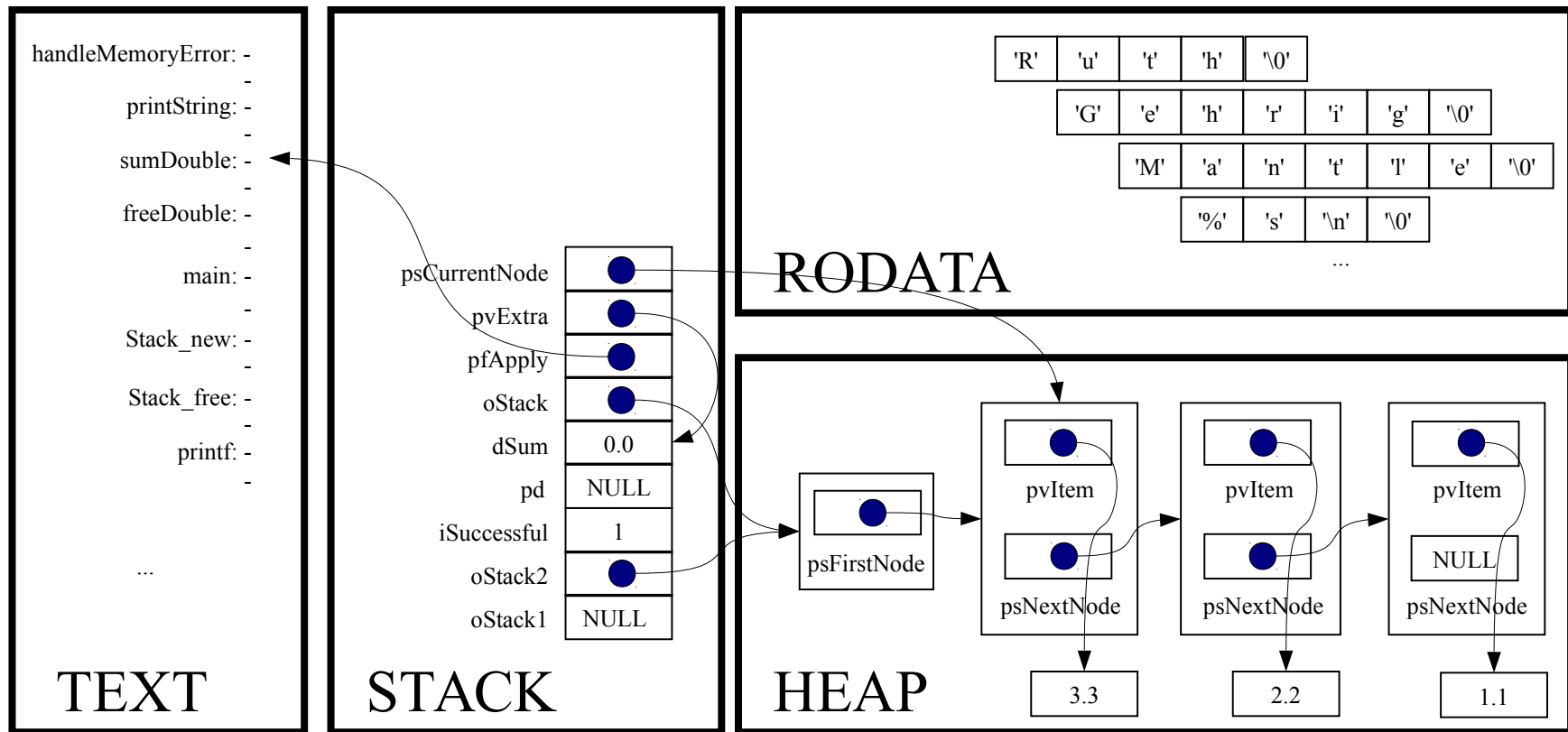
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



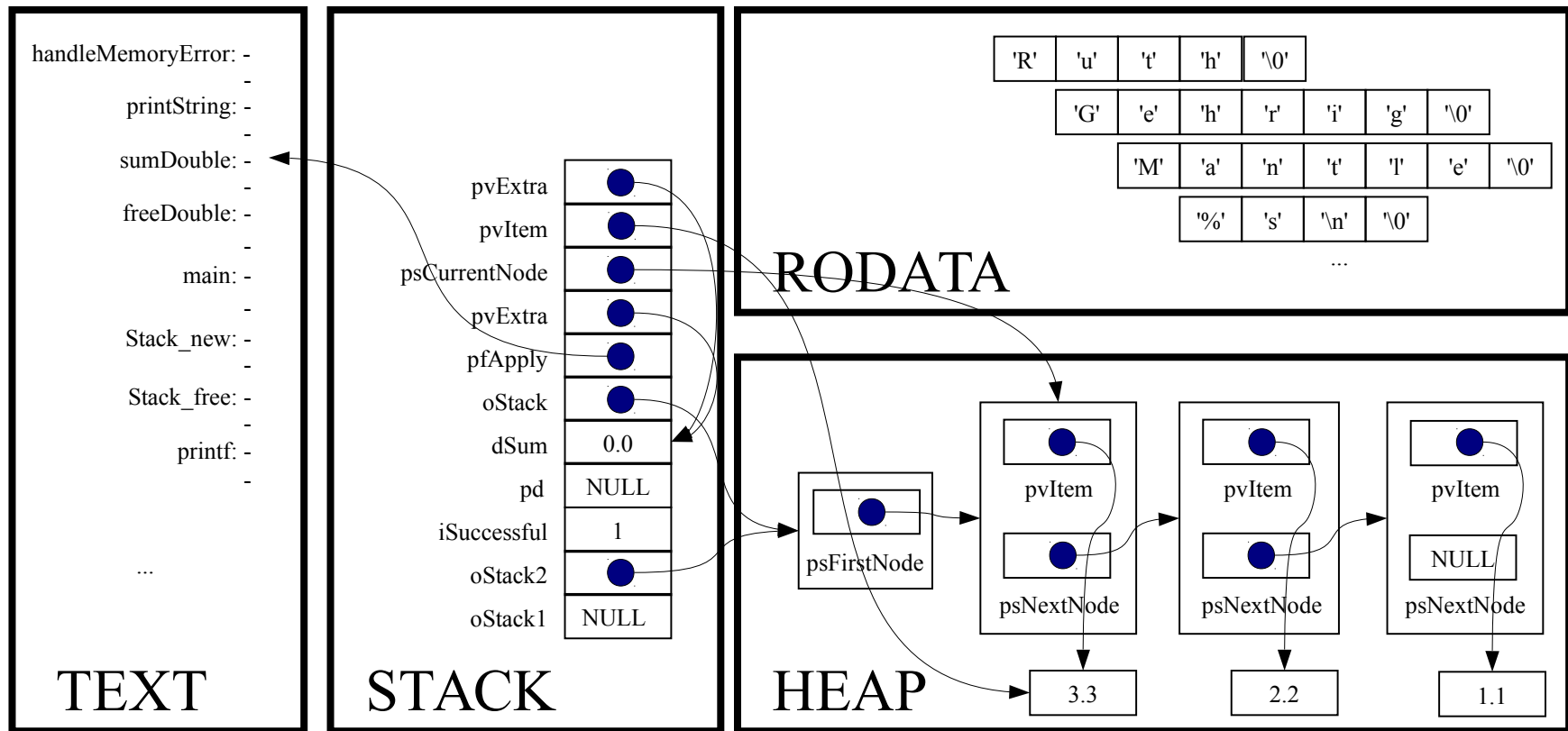
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```
(*pfApply)((void*)psCurrentNode->pvItem, (void*)pvExtra);
```



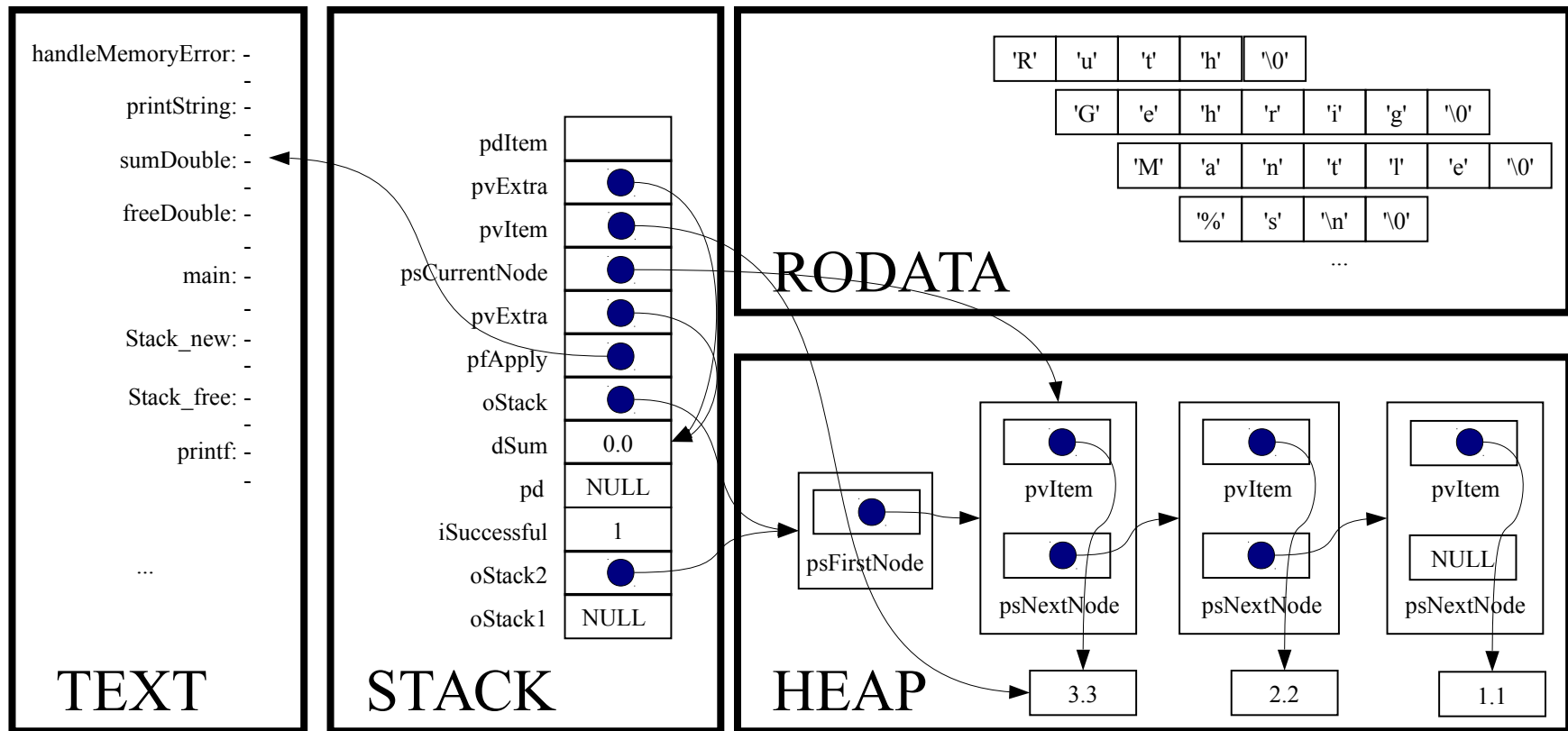
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```
static void sumDouble(void *pvItem, void *pvExtra)
```



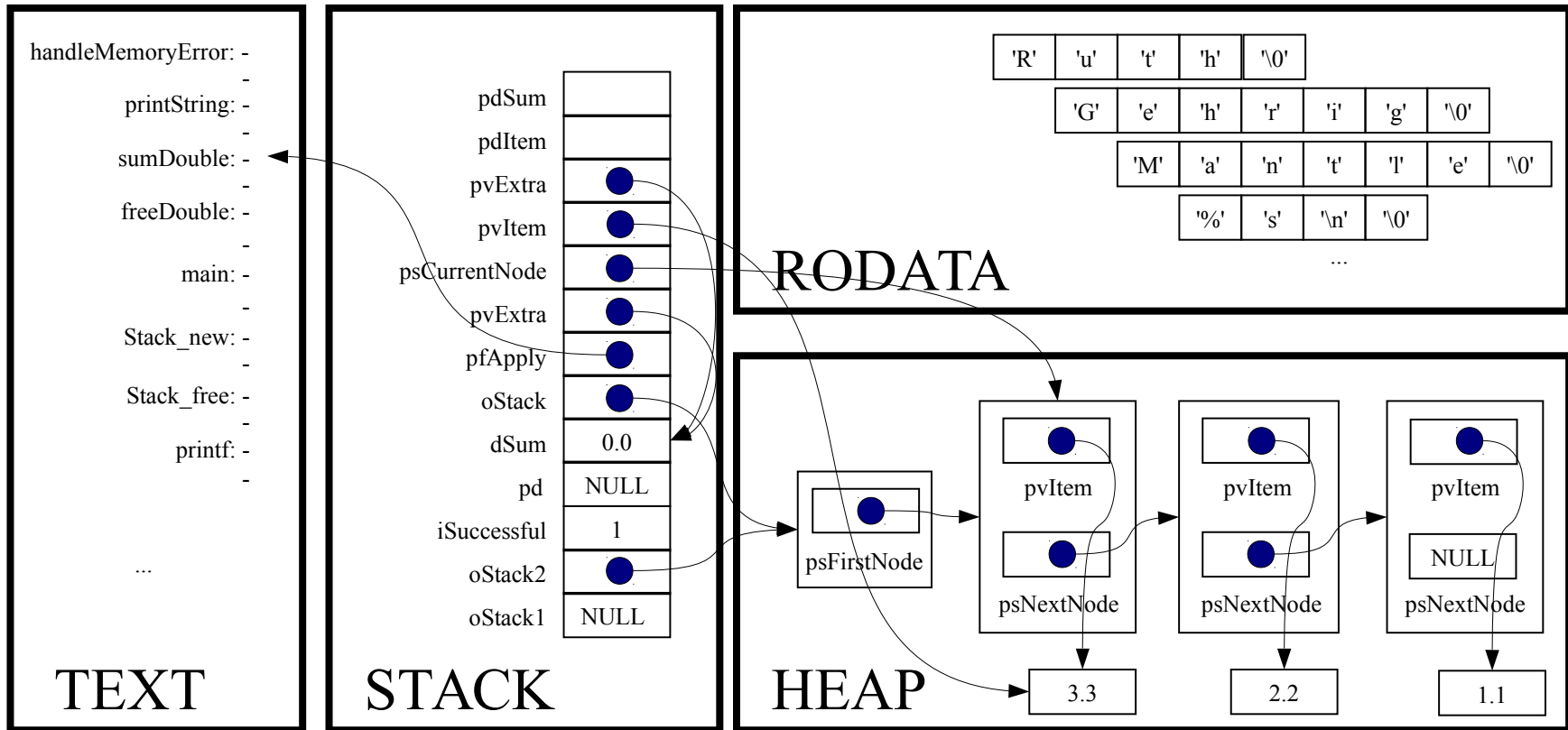
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```
double *pdItem;
```



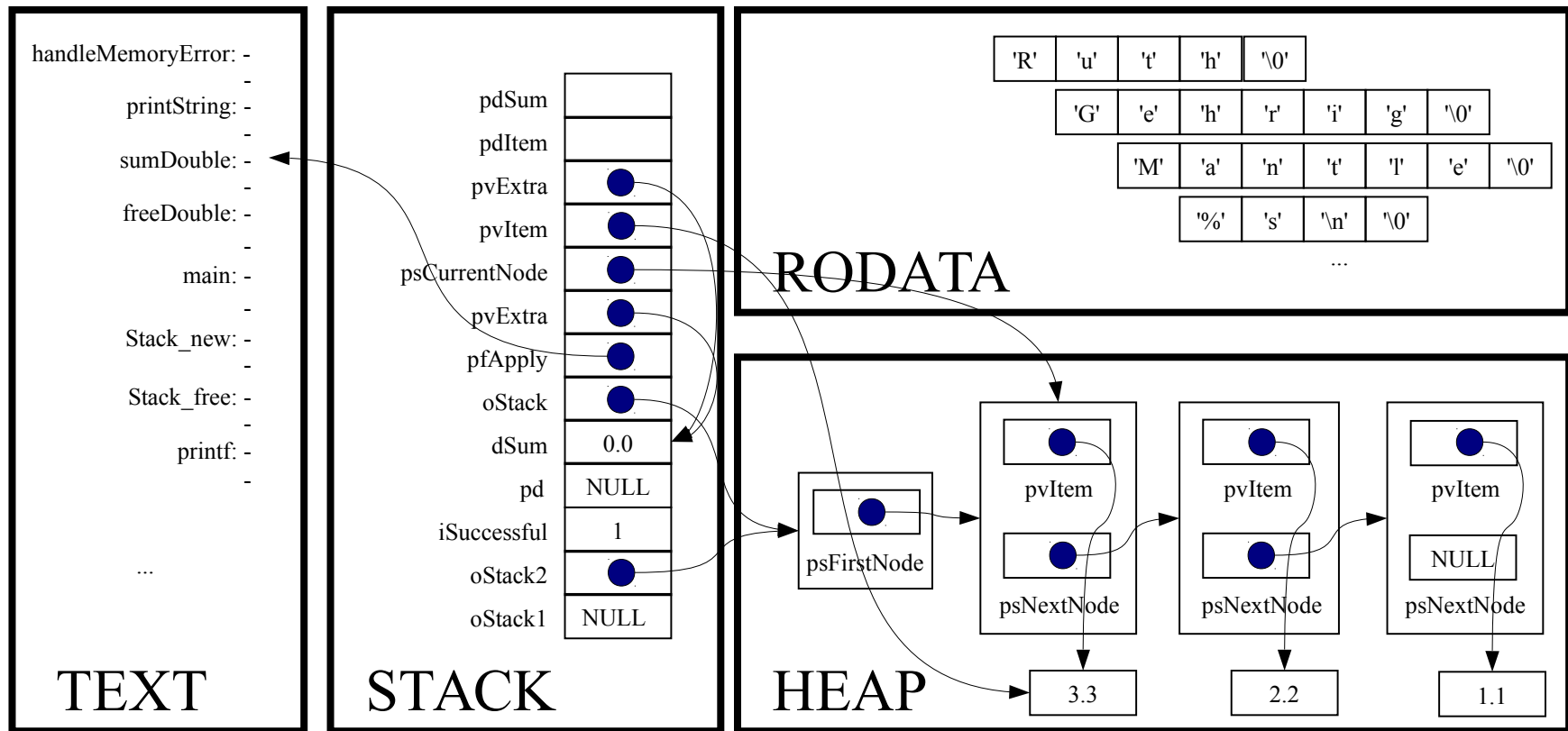
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```
double *pdSum;
```



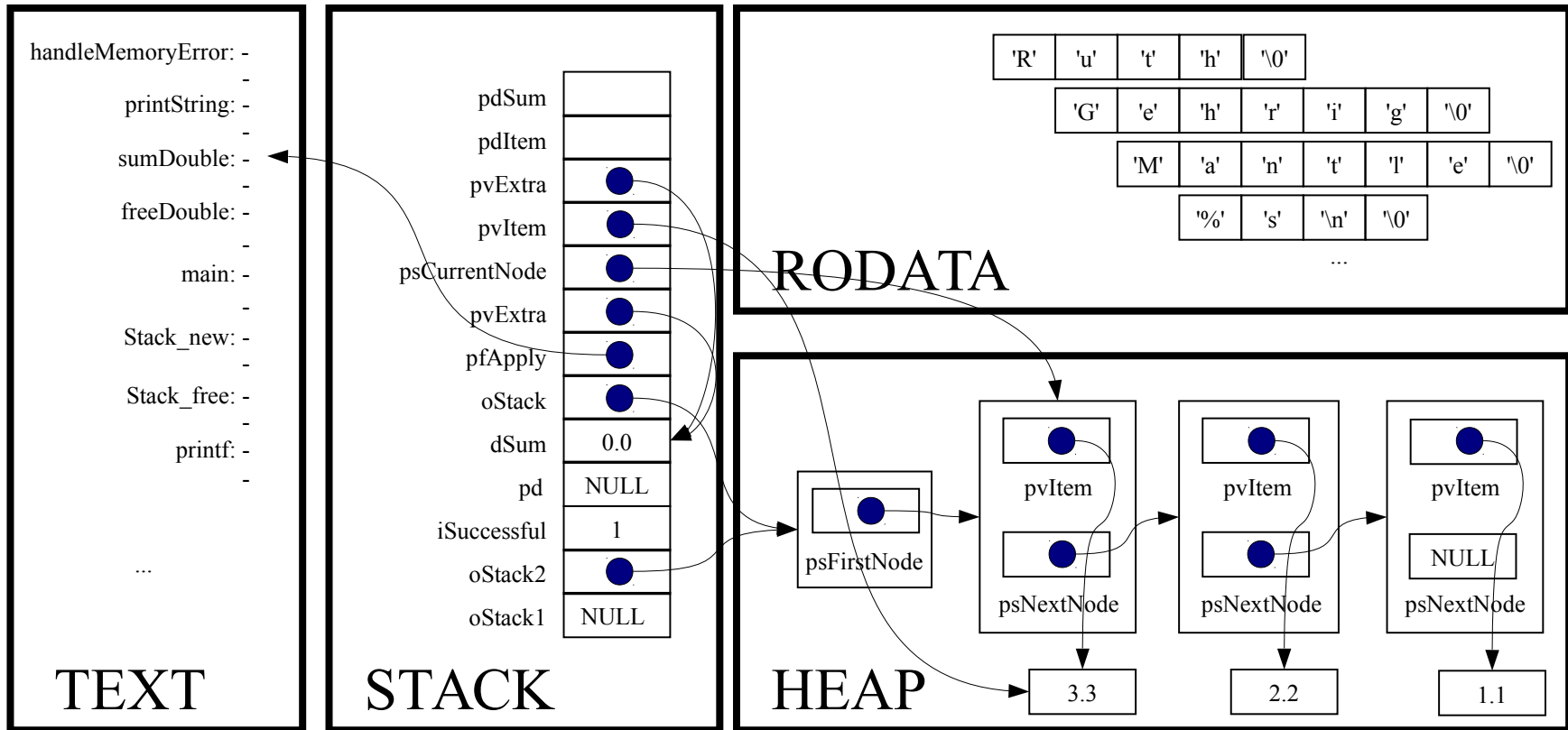
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```
assert(pvItem != NULL);
```



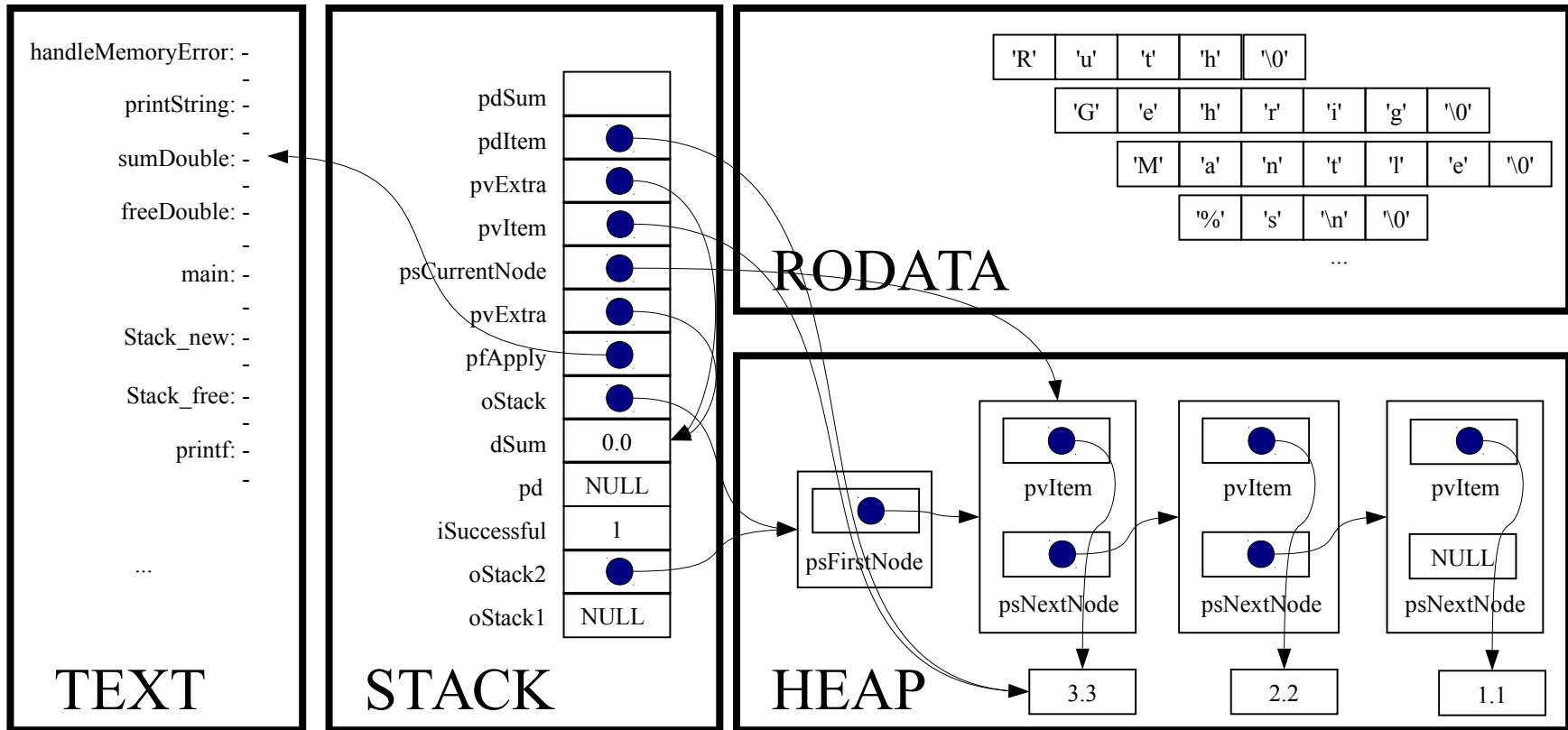
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```
assert (pvExtra != NULL);
```



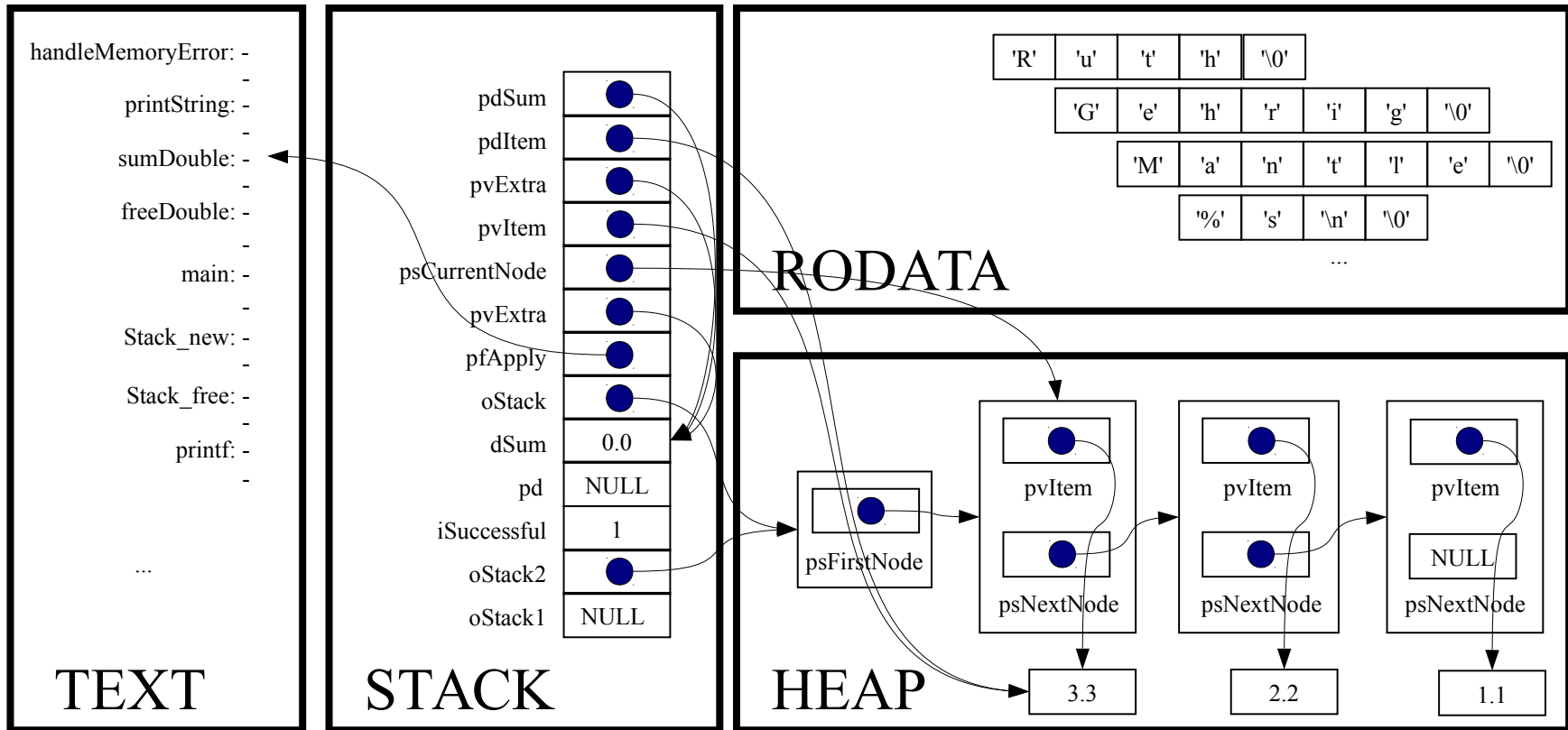
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```
pdItem = (double*)pvItem;
```



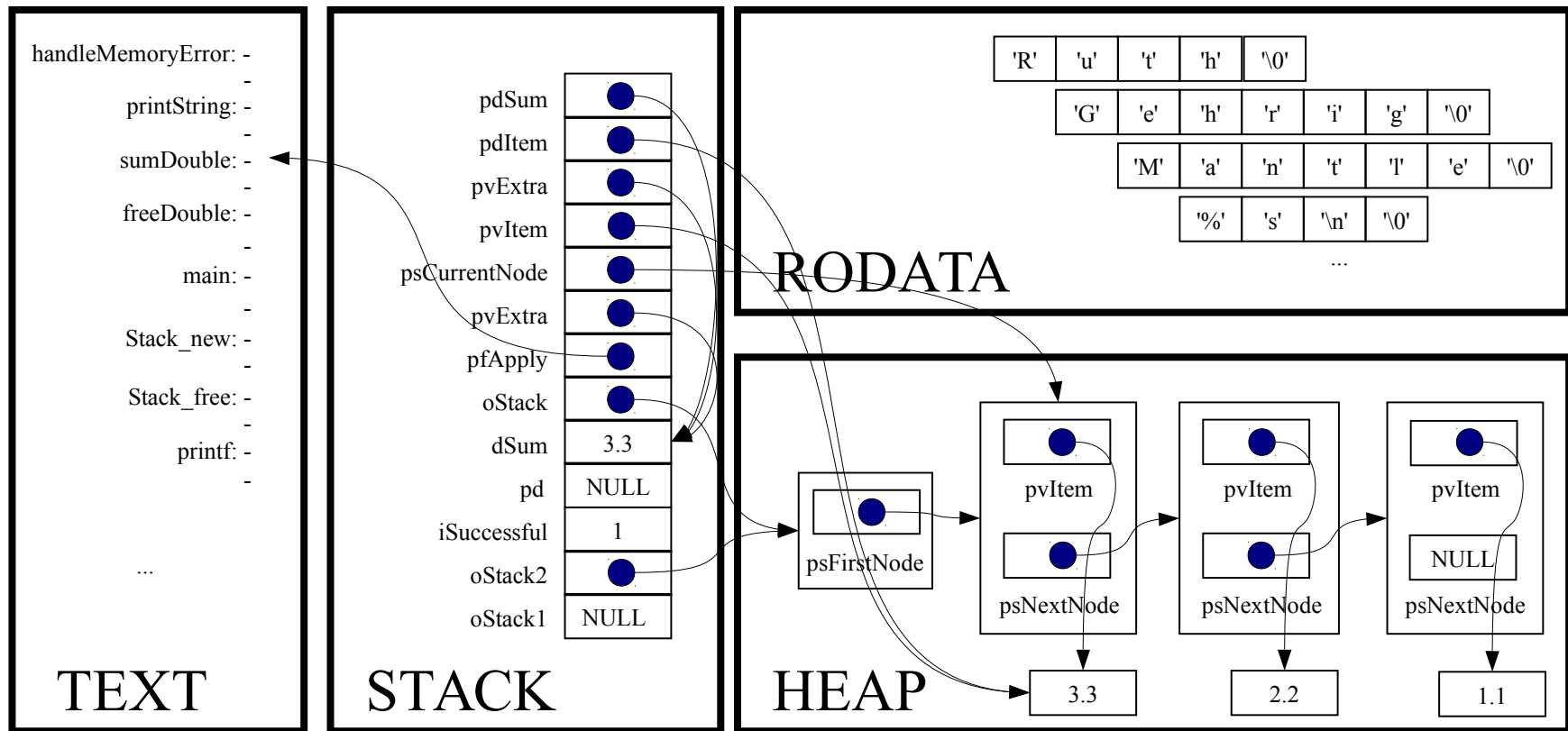
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```
pdSum = (double*)pvExtra;
```



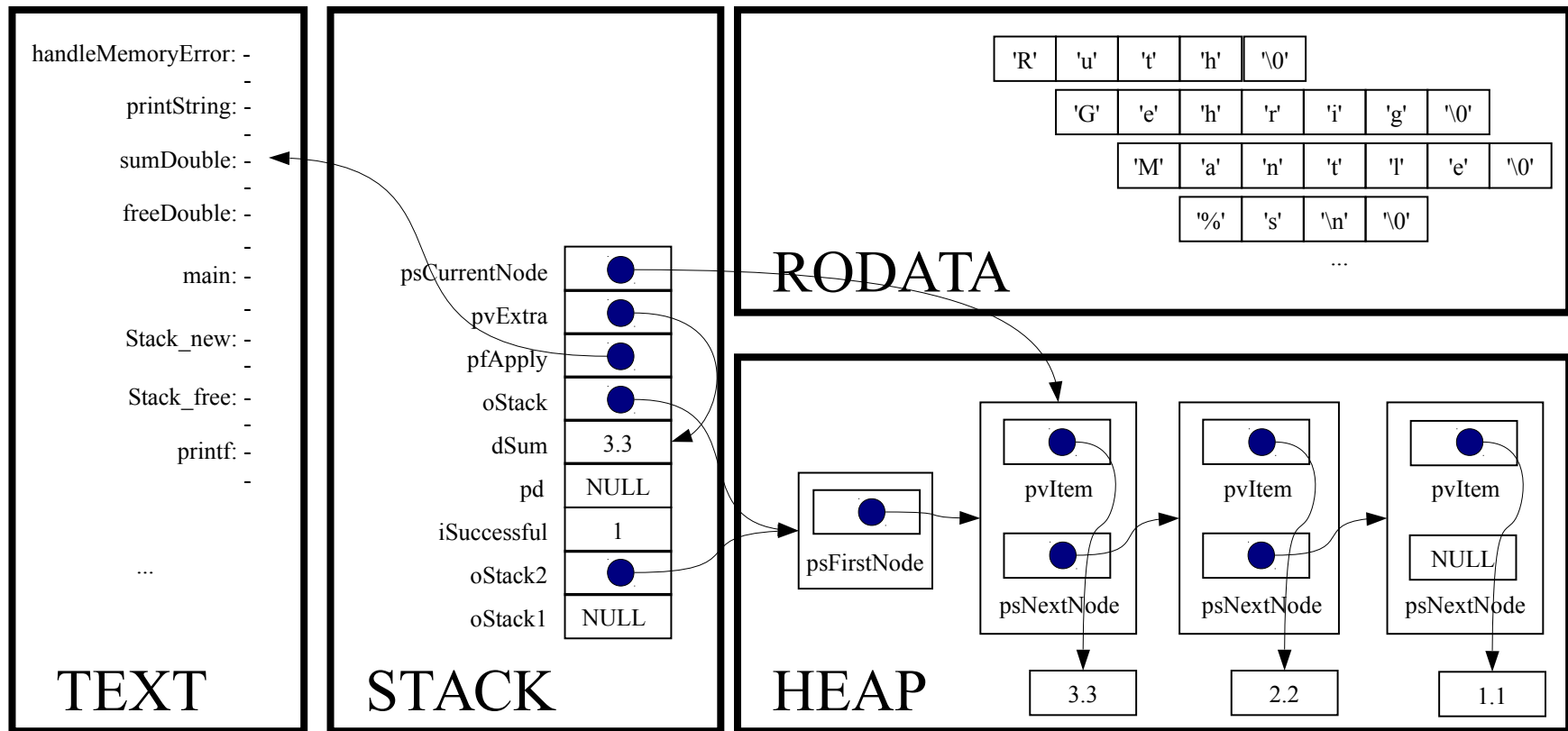
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```
*pdSum += *pdItem;
```



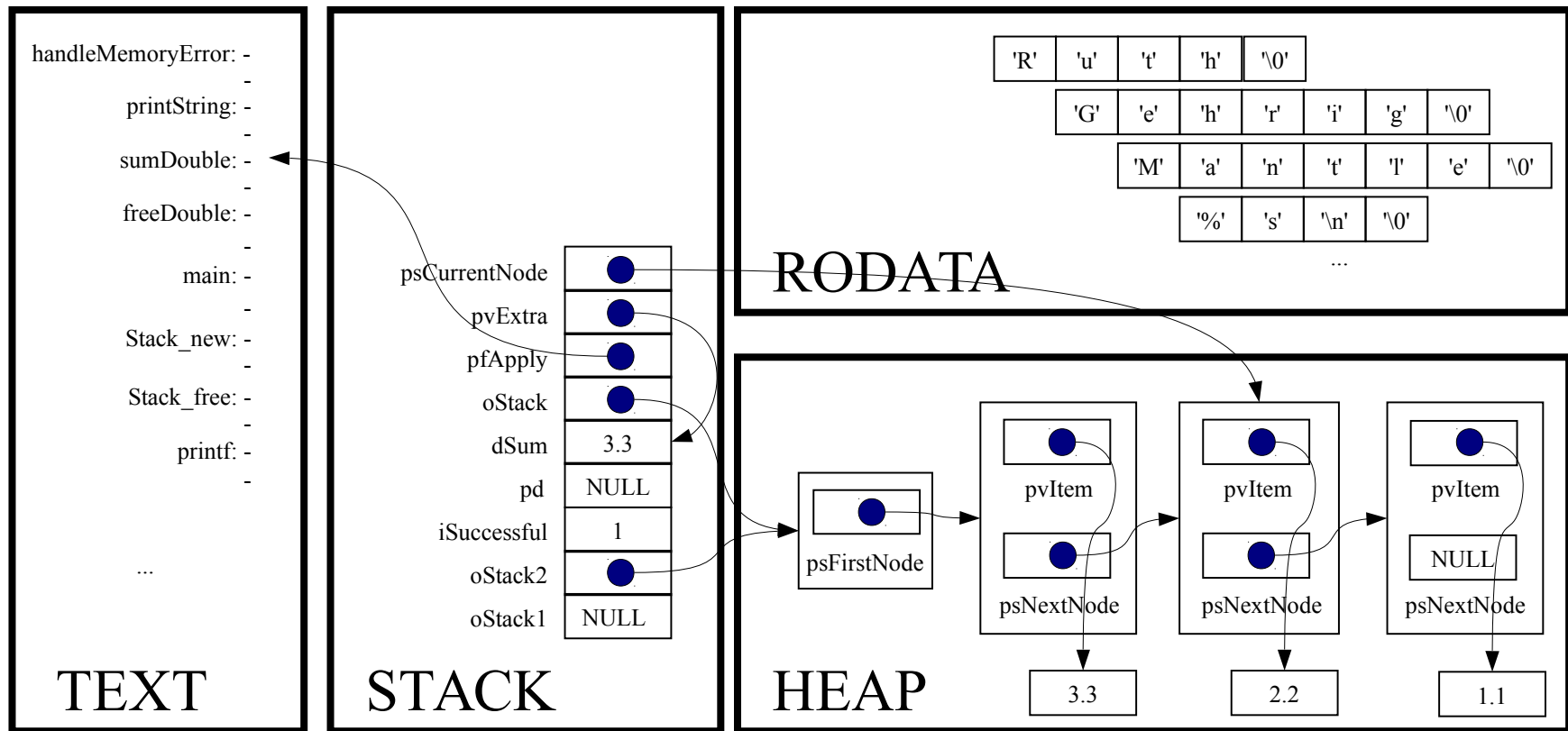
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Implicit return



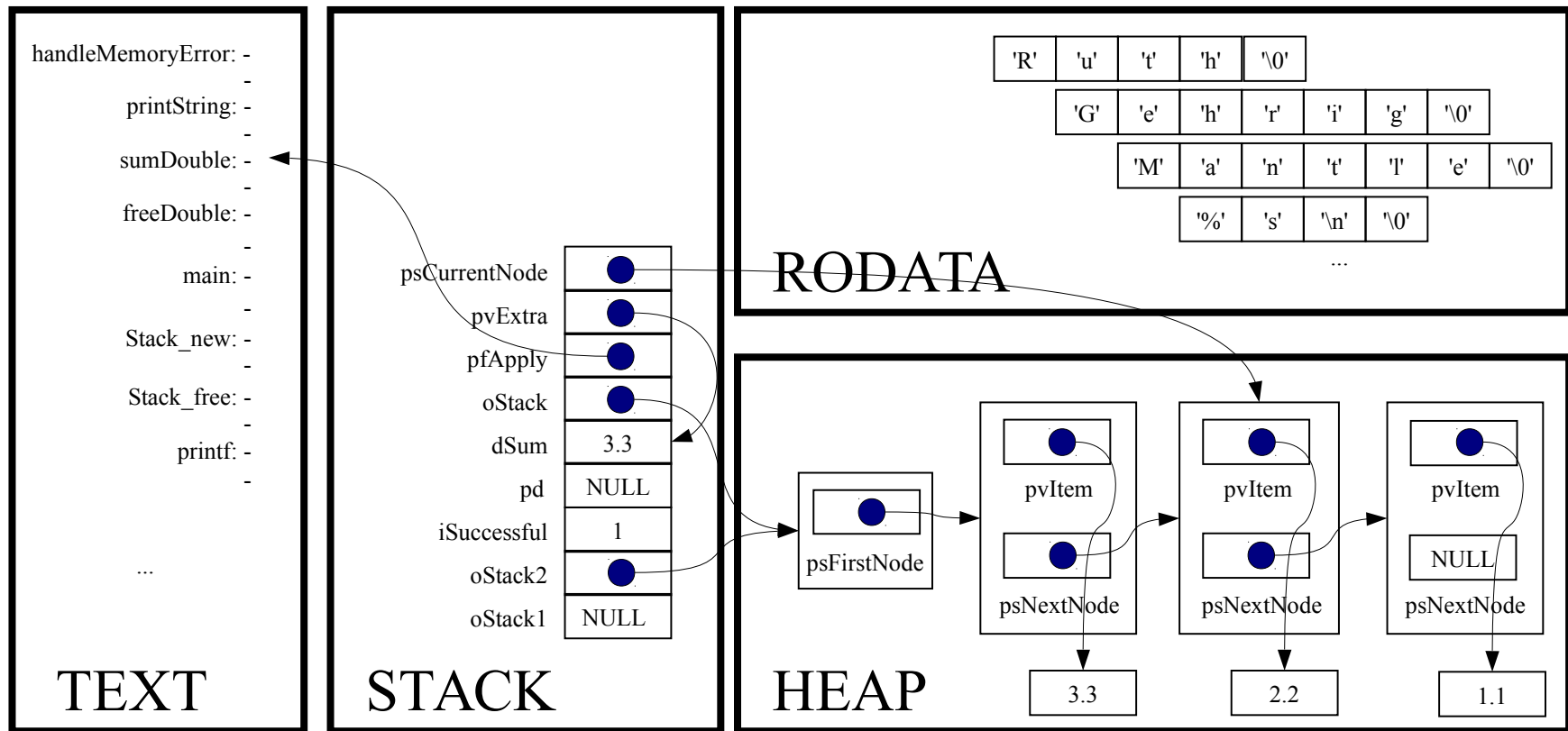
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



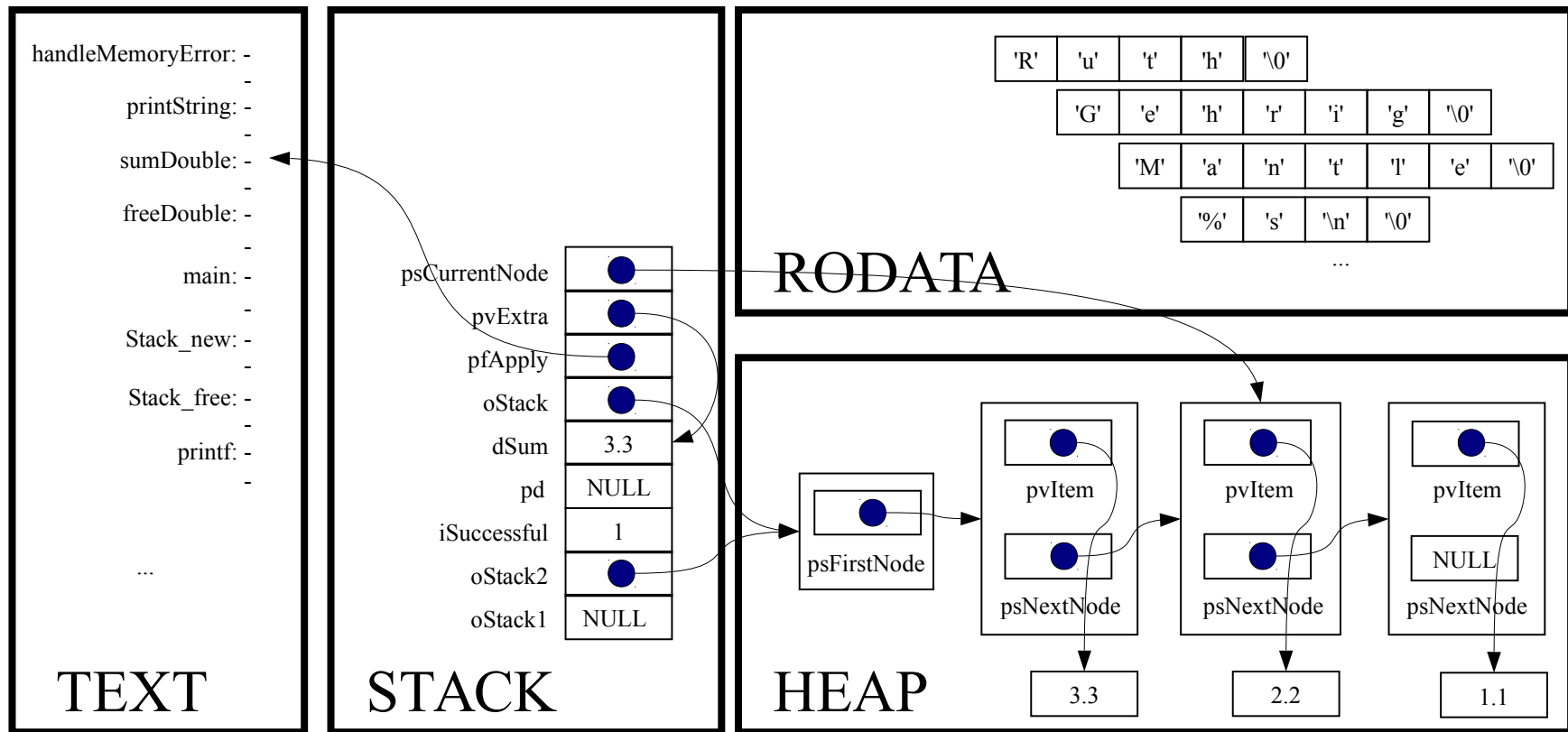
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



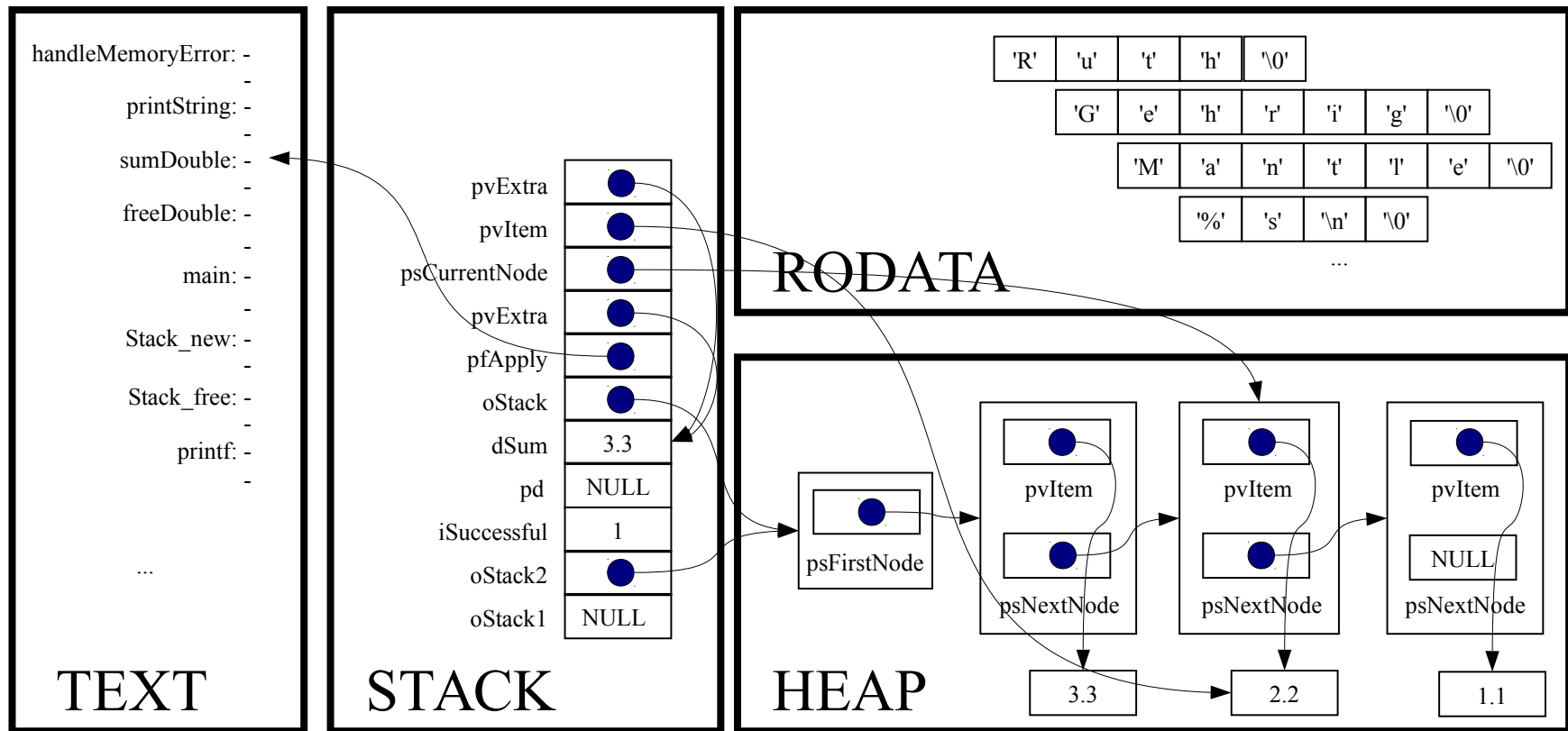
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```
(*pfApply)((void*)psCurrentNode->pvItem, (void*)pvExtra);
```



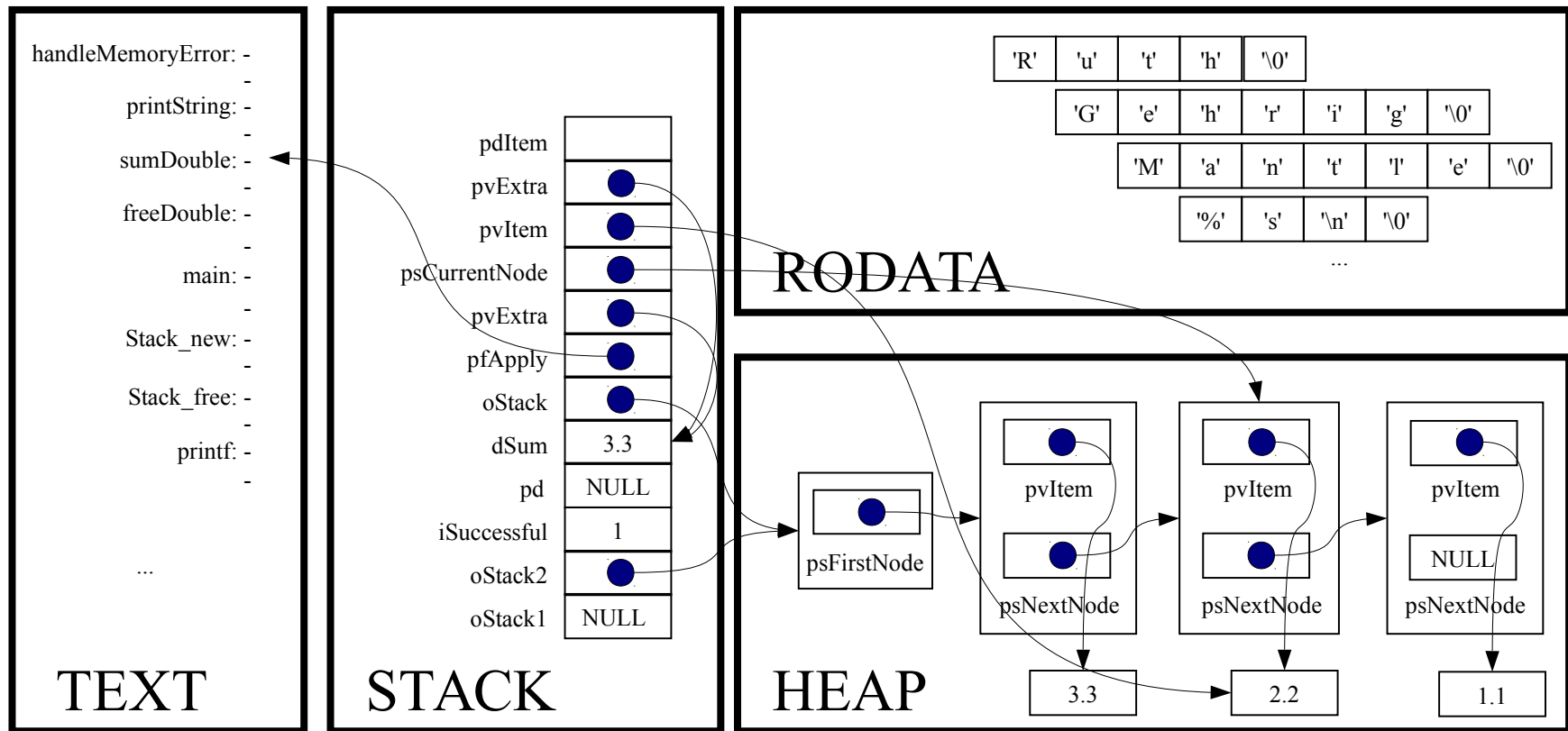
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```
static void sumDouble(void *pvItem, void *pvExtra)
```



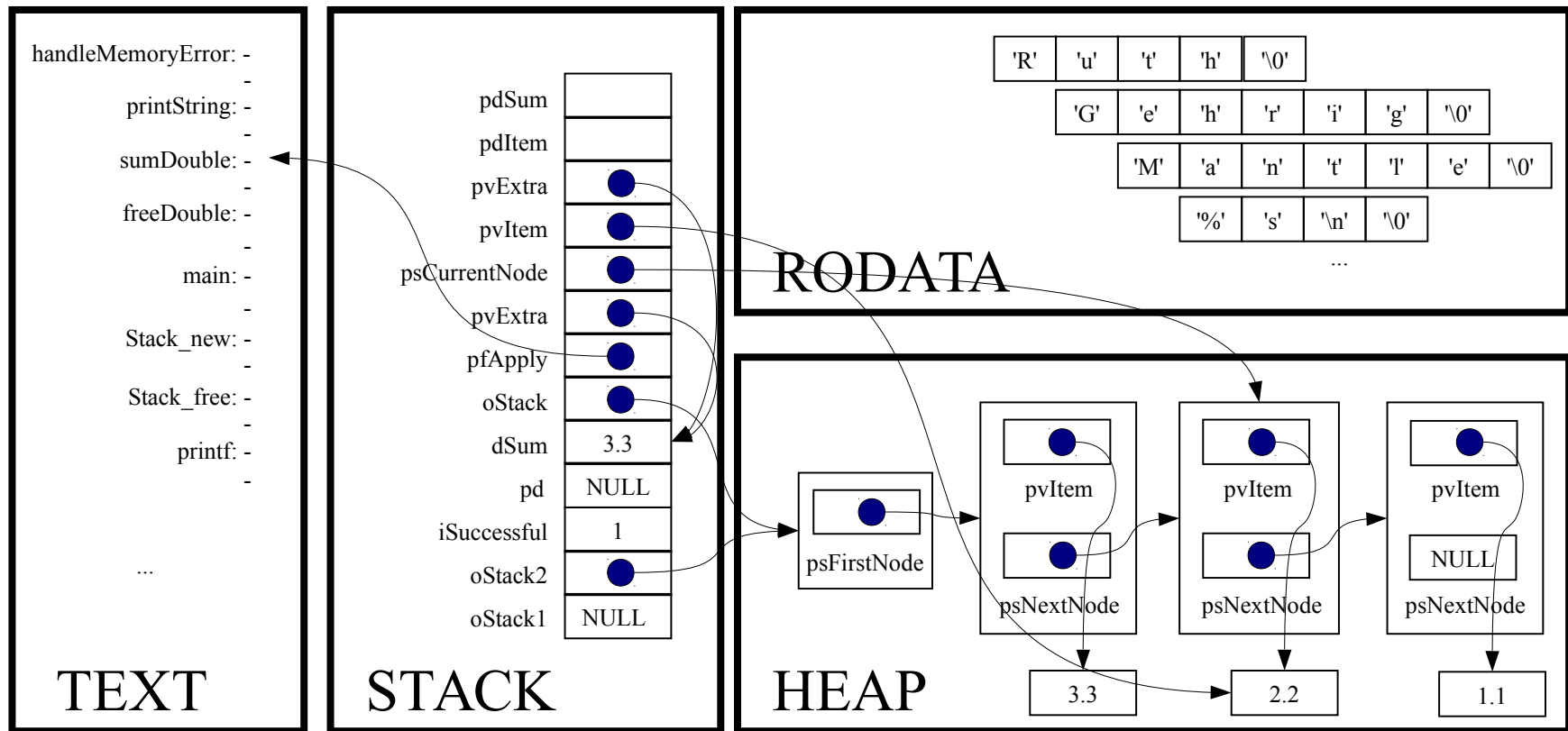
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```
double *pdItem;
```



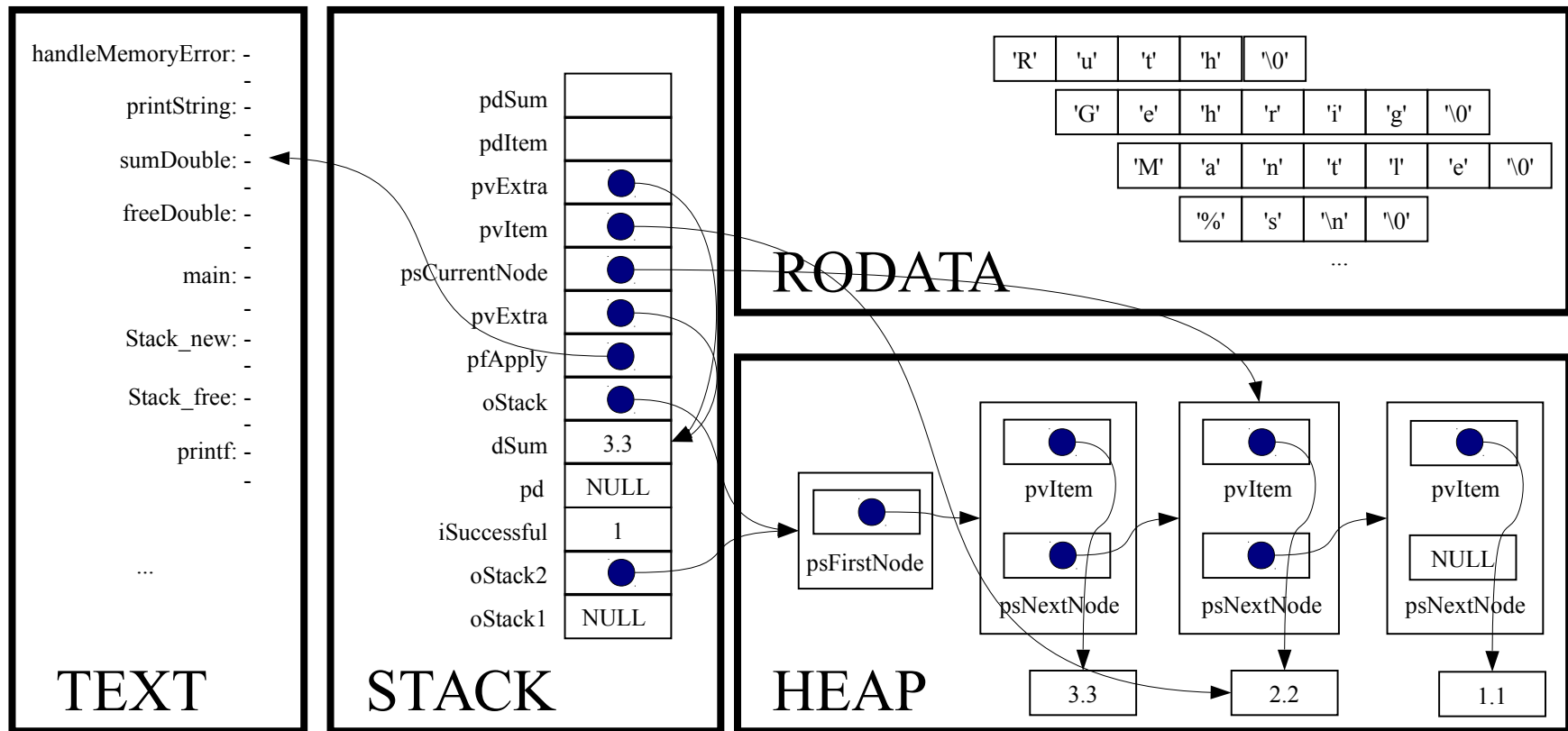
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```
double *pdSum;
```



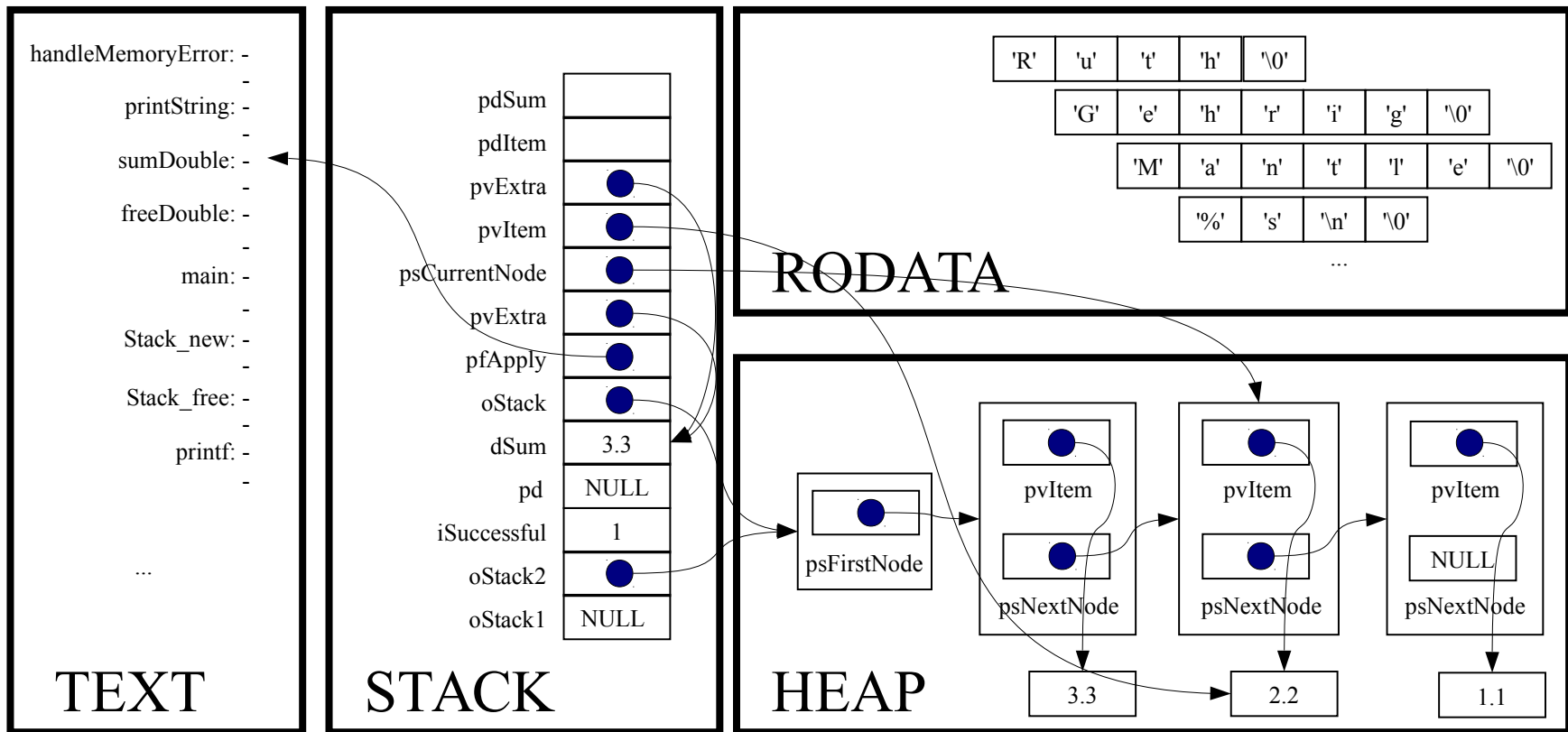
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```
assert(pvItem != NULL);
```



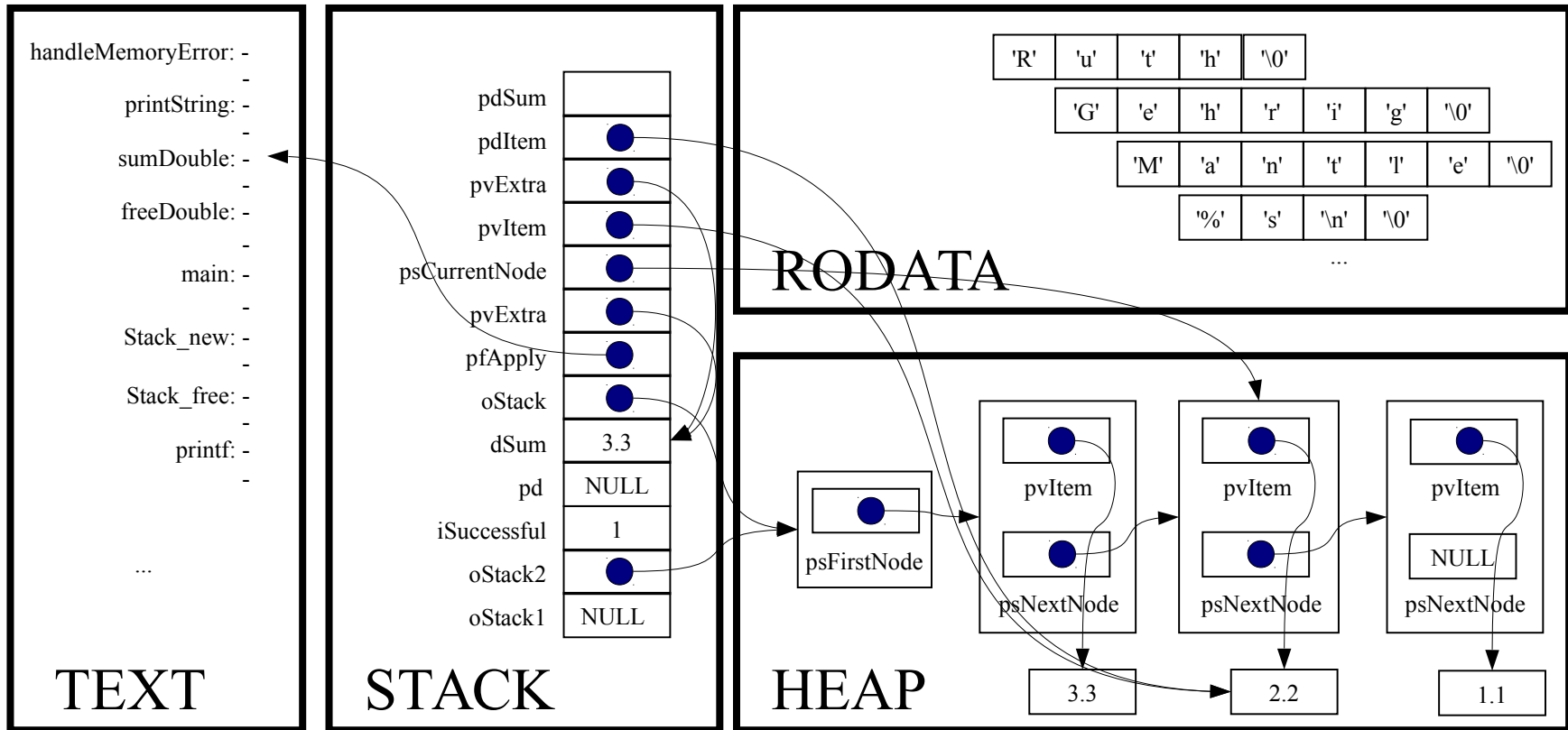
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```
assert (pvExtra != NULL);
```



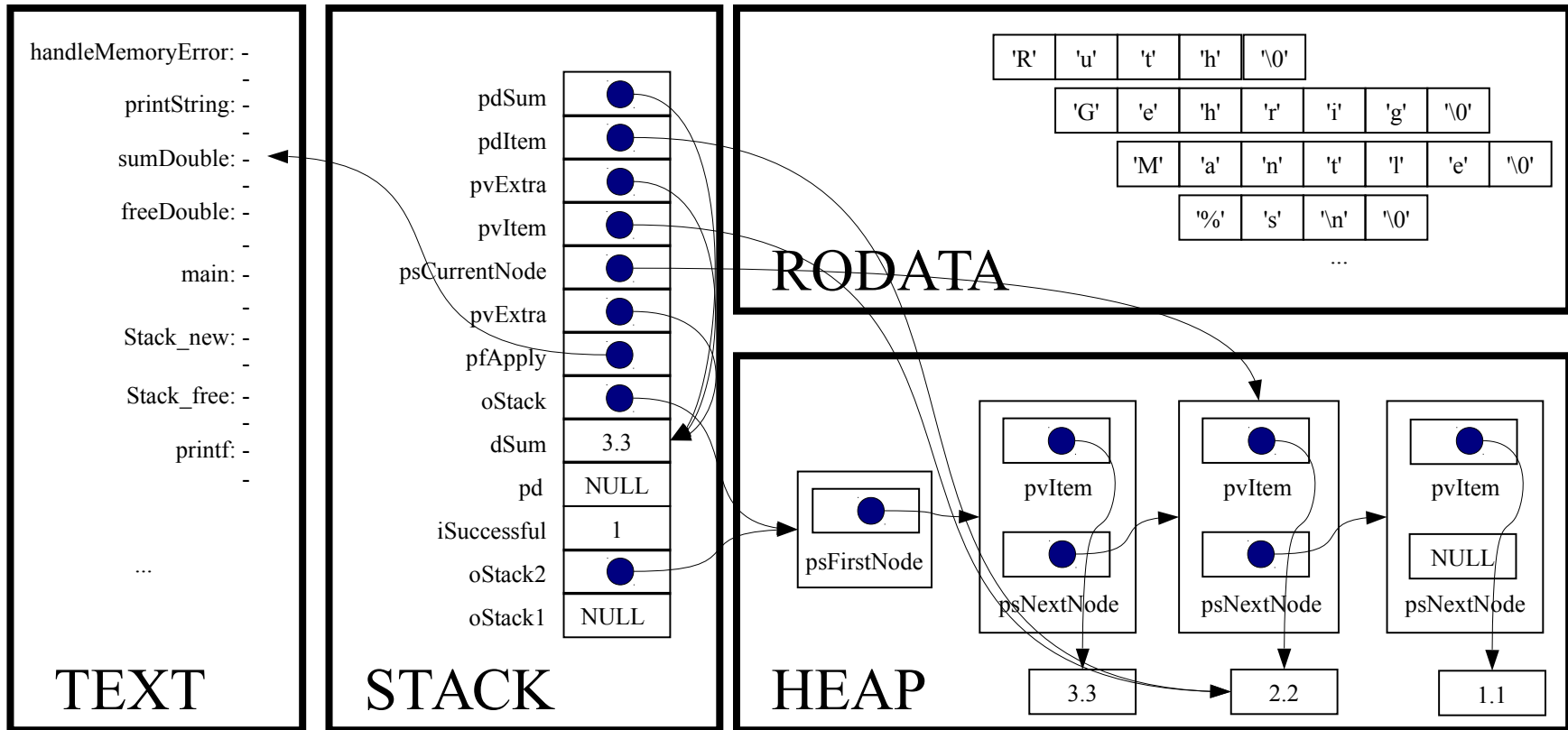
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```
pdItem = (double*)pvItem;
```



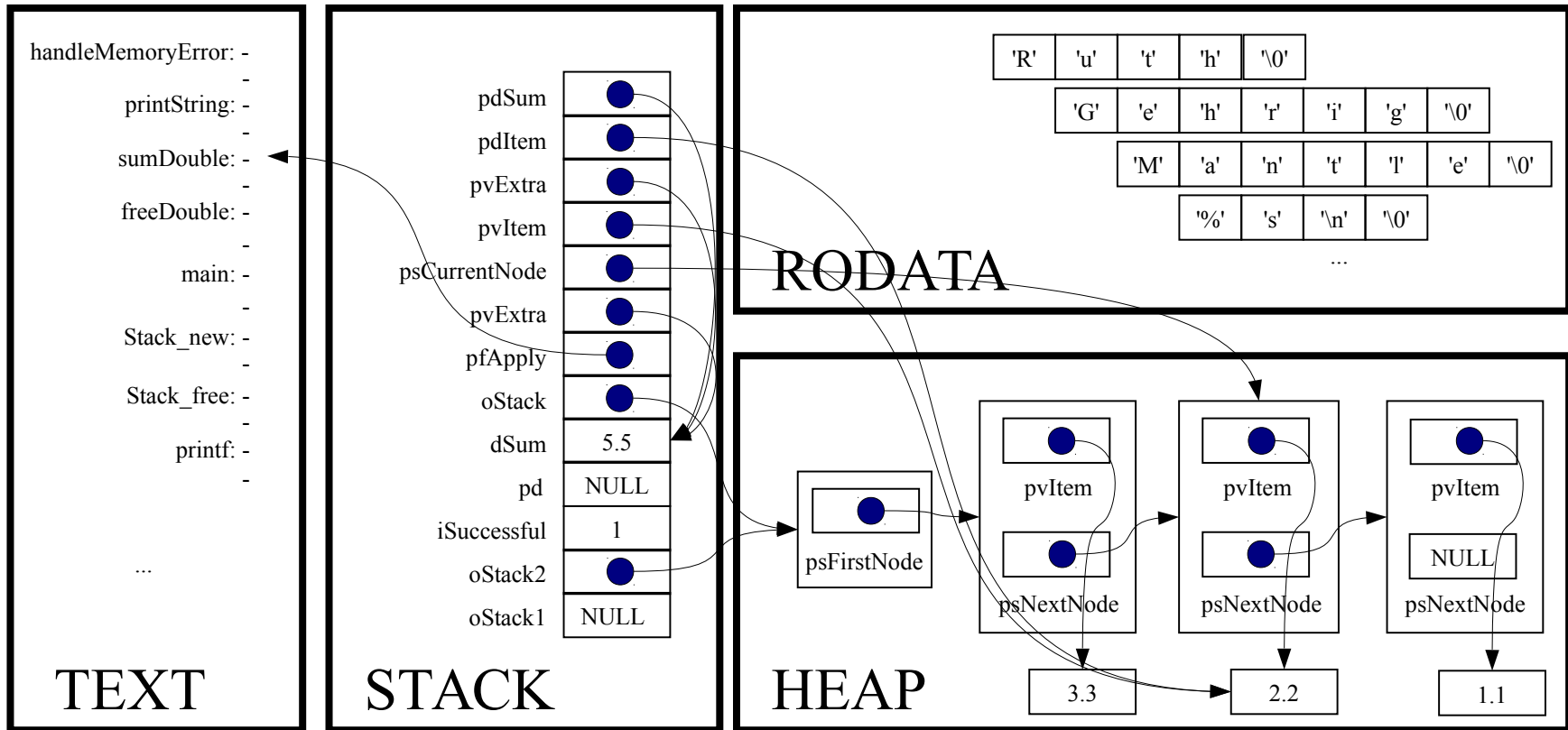
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```
pdSum = (double*)pvExtra;
```



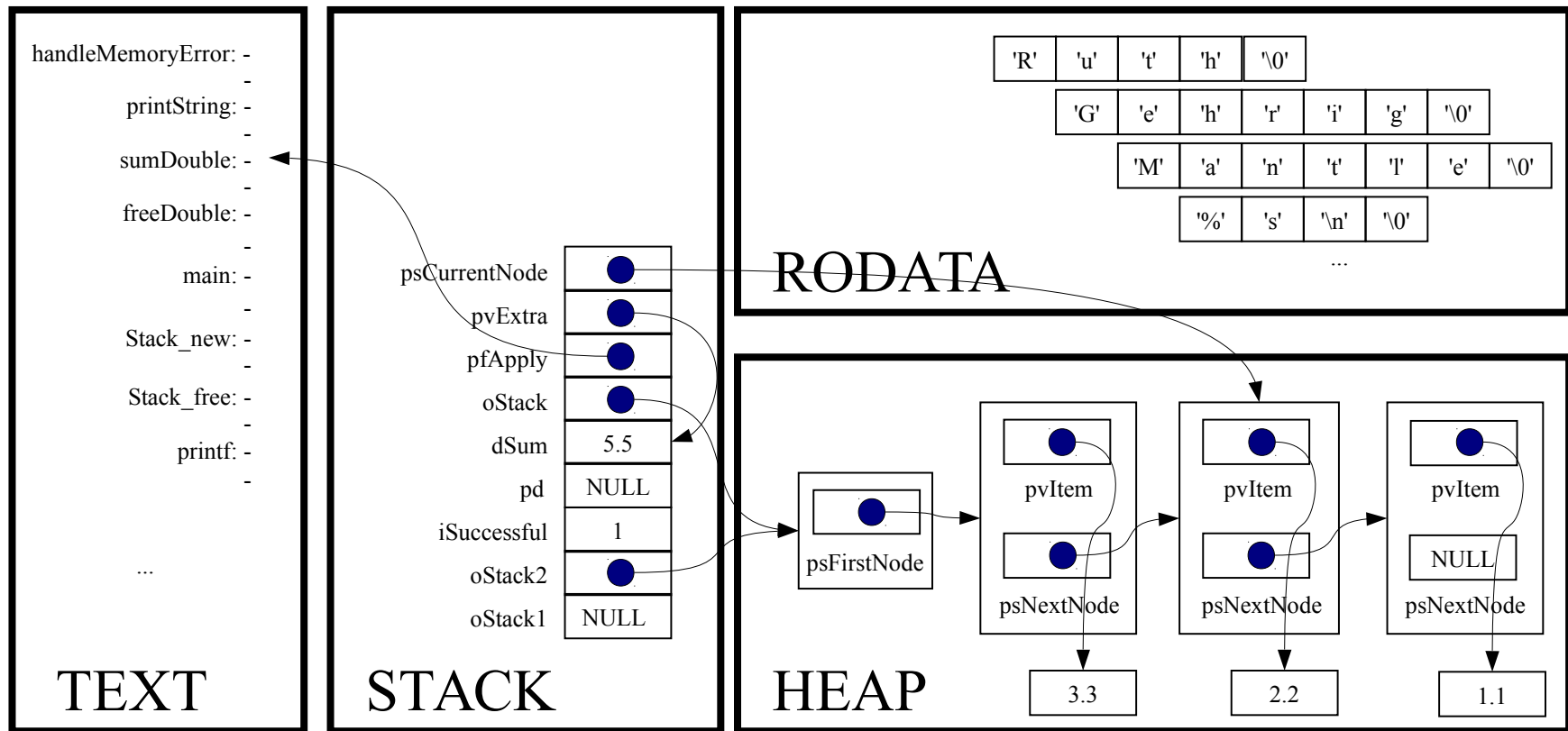
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```
*pdSum += *pdItem;
```



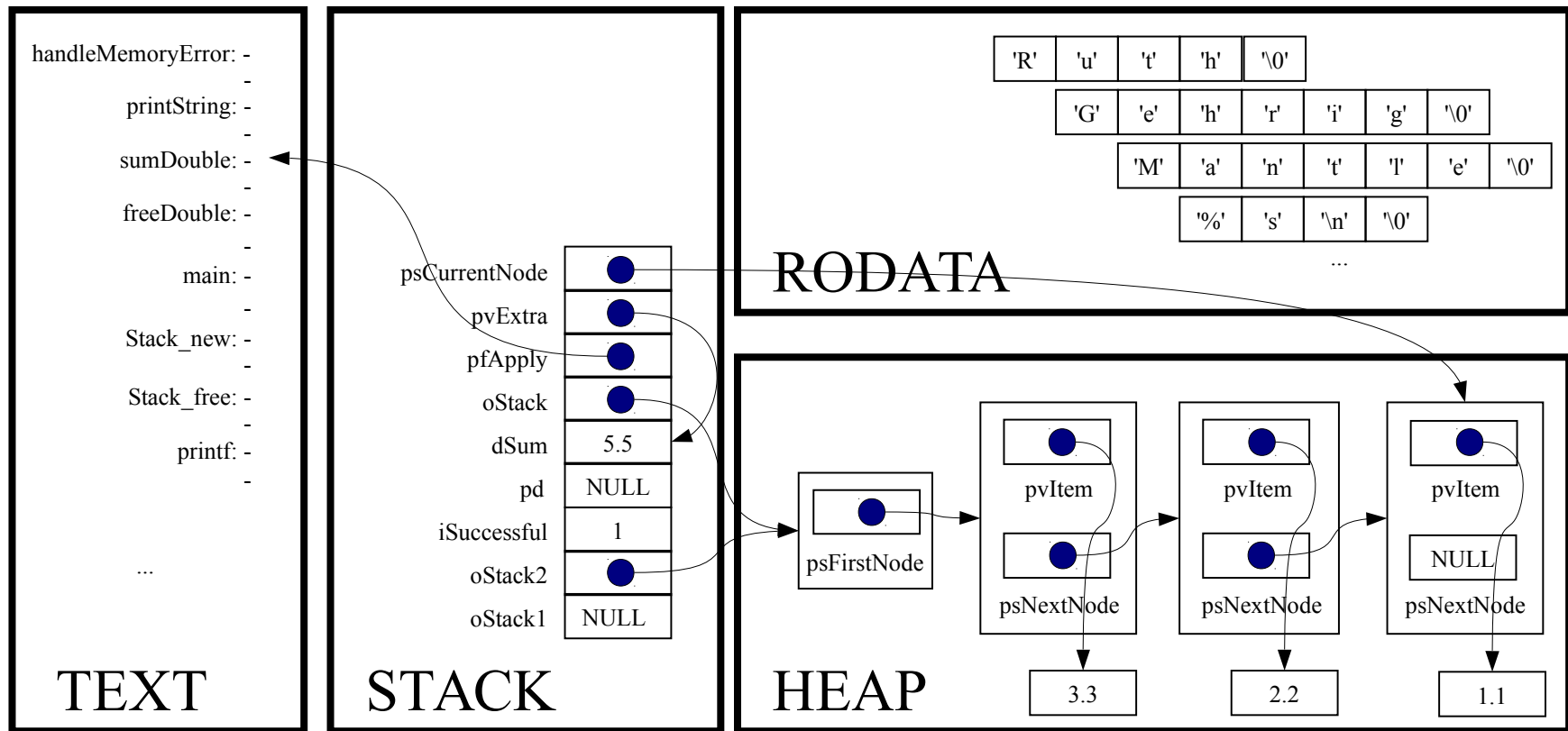
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Implicit return



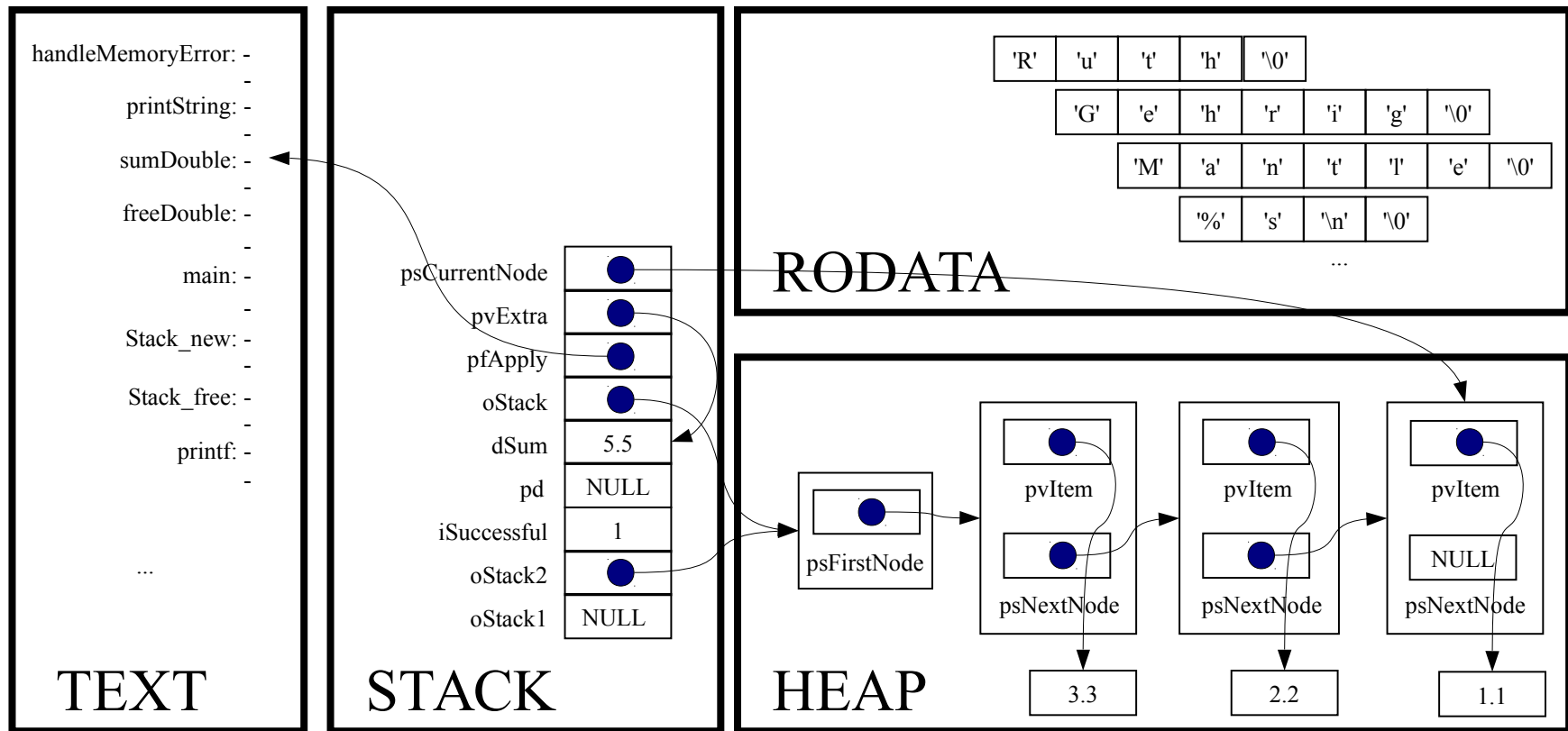
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



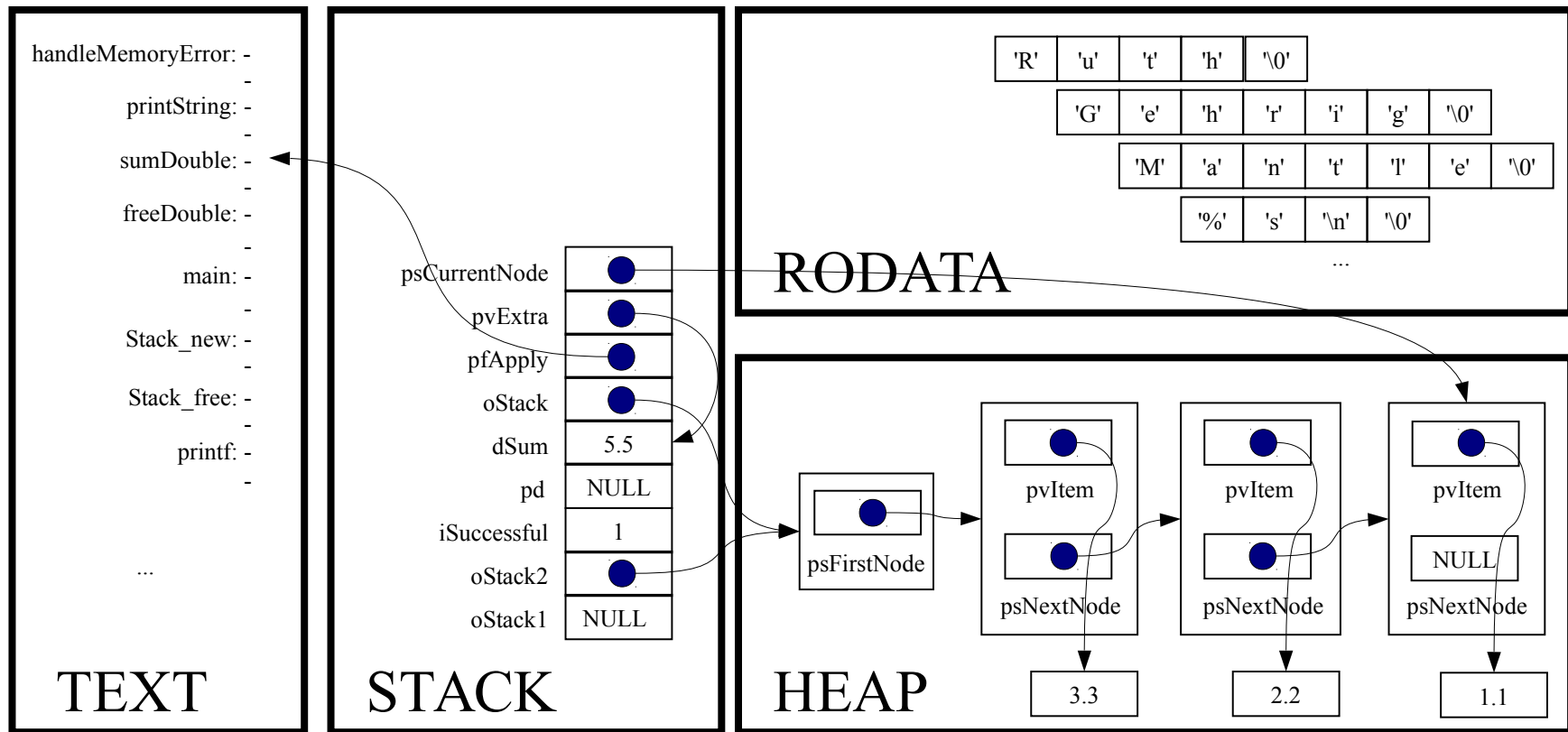
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



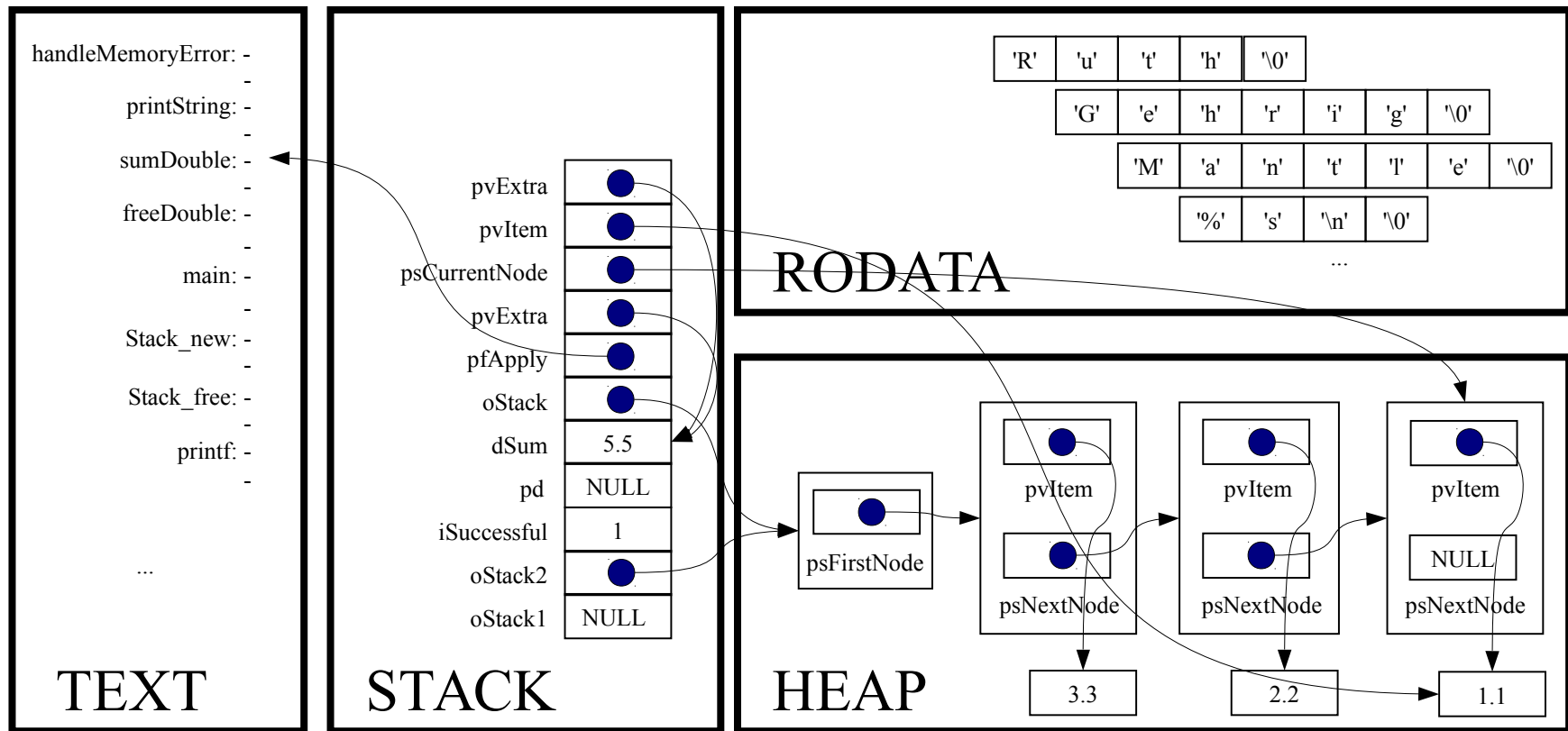
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```
(*pfApply)((void*)psCurrentNode->pvItem, (void*)pvExtra);
```



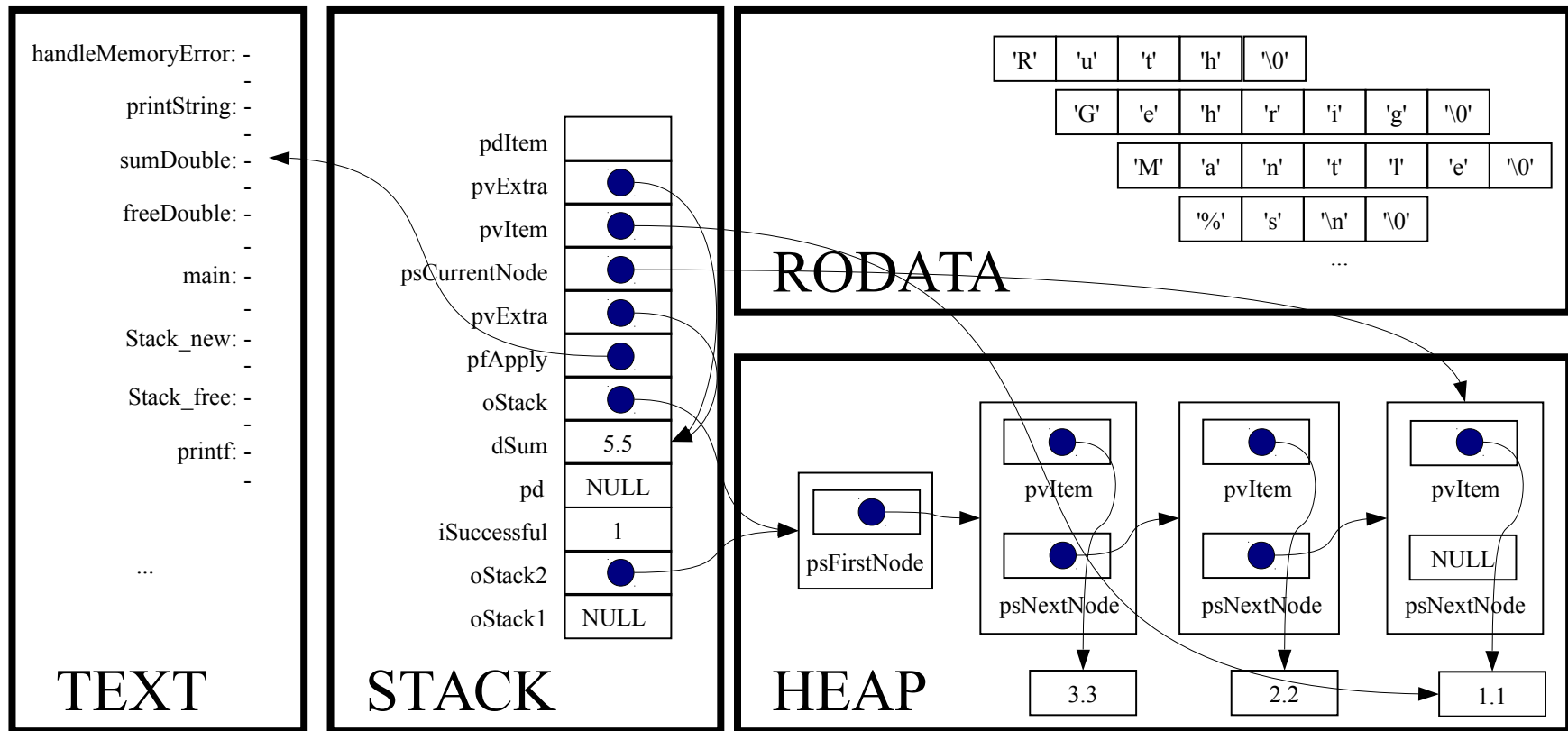
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```
static void sumDouble(void *pvItem, void *pvExtra)
```



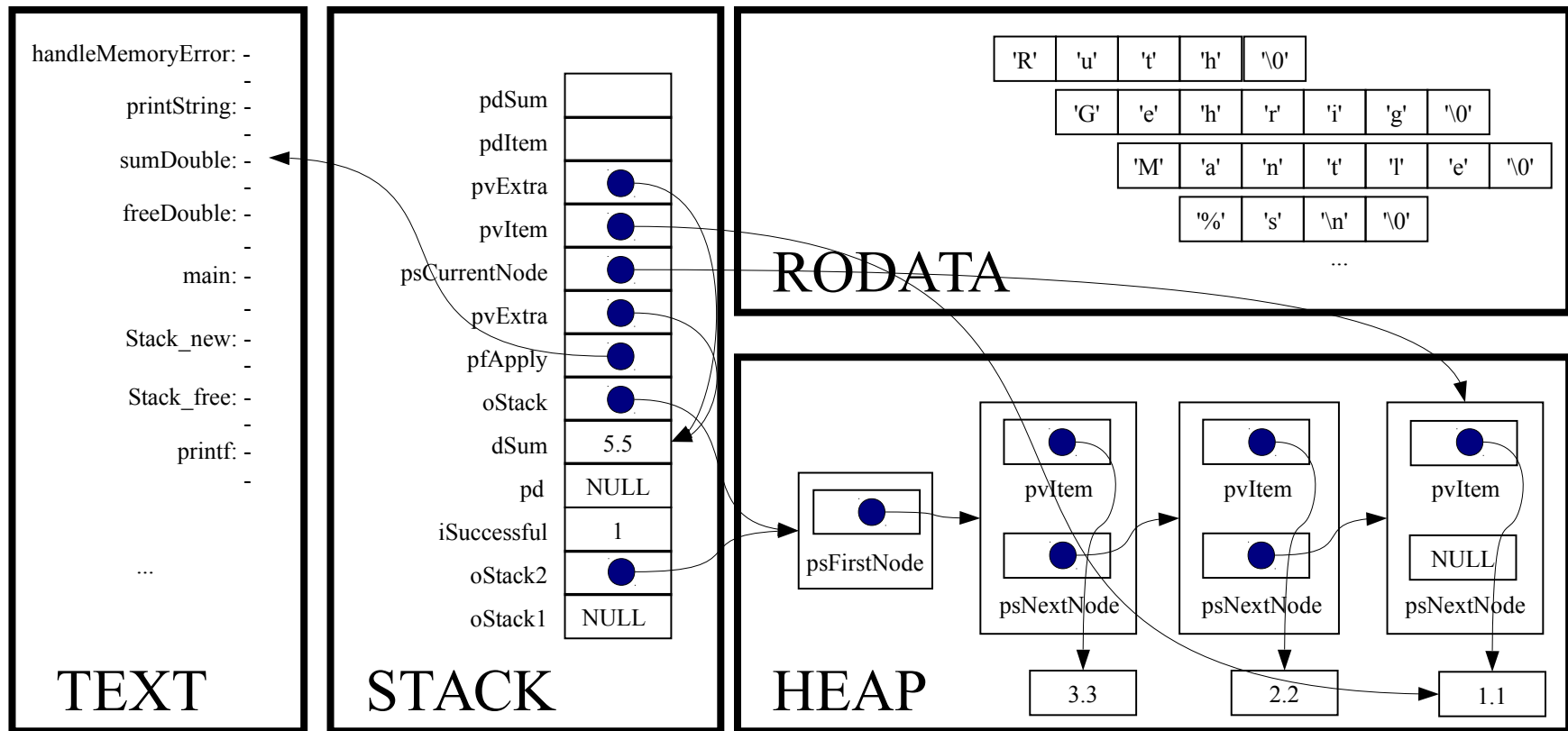
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```
double *pdItem;
```



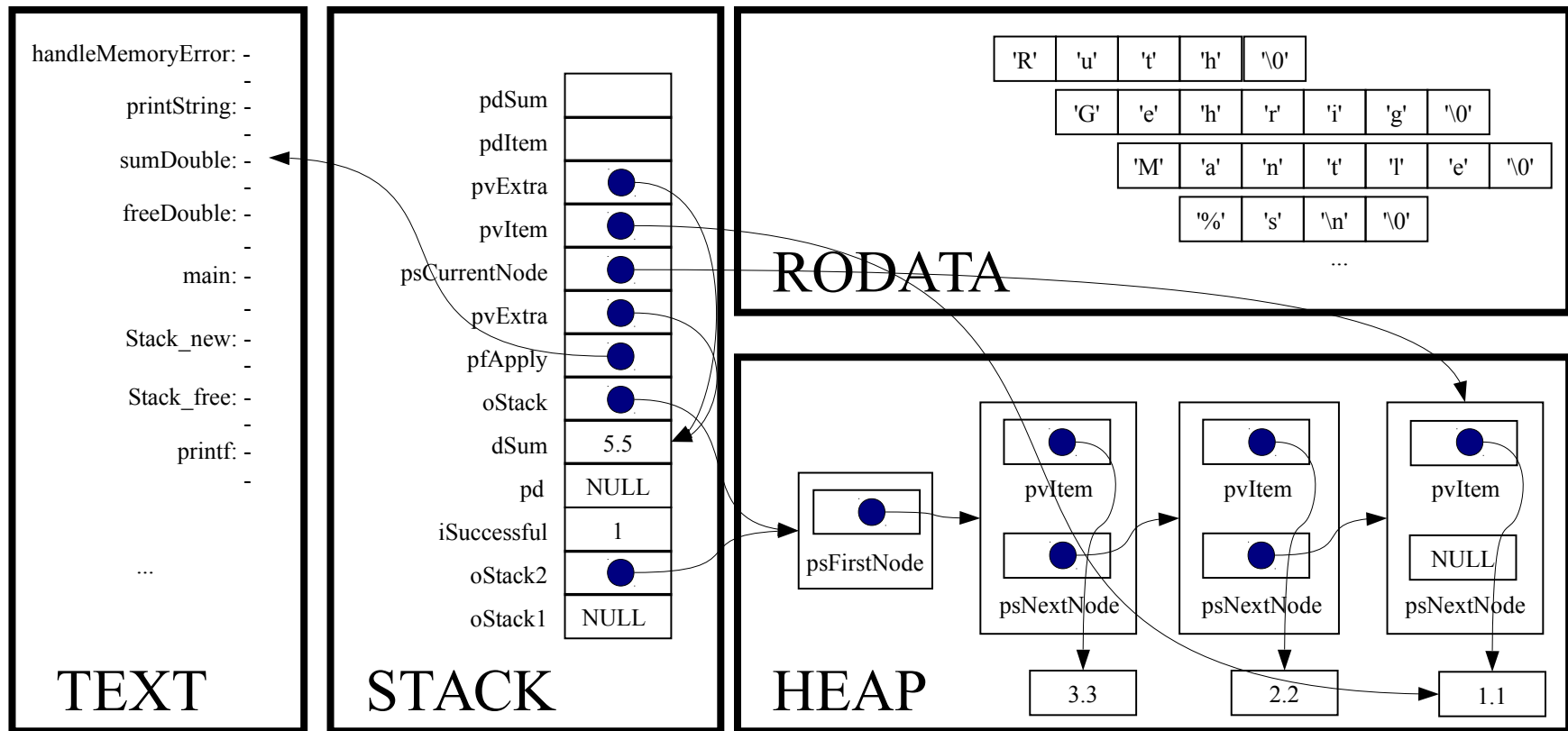
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```
double *pdSum;
```



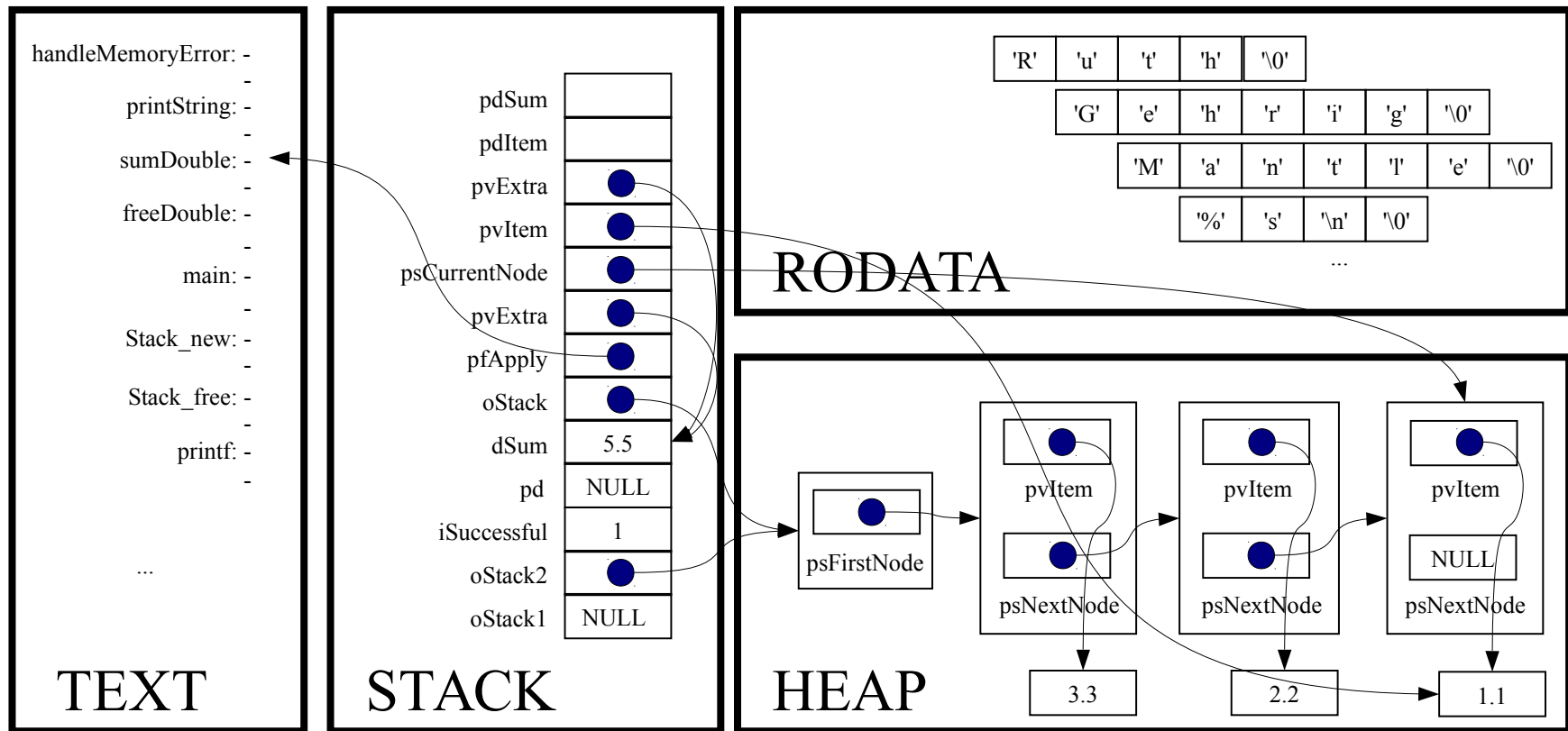
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```
assert(pvItem != NULL);
```



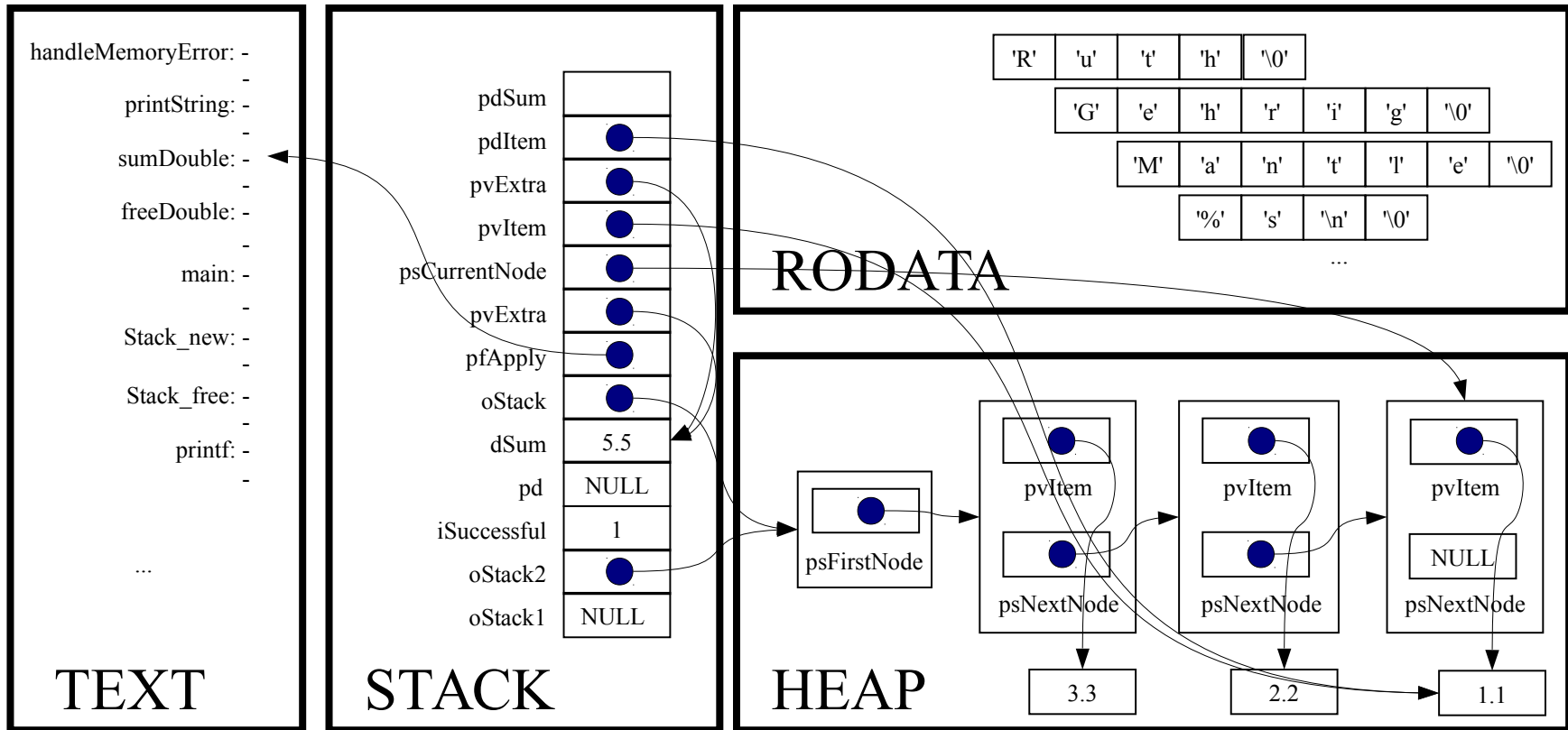
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```
assert (pvExtra != NULL);
```



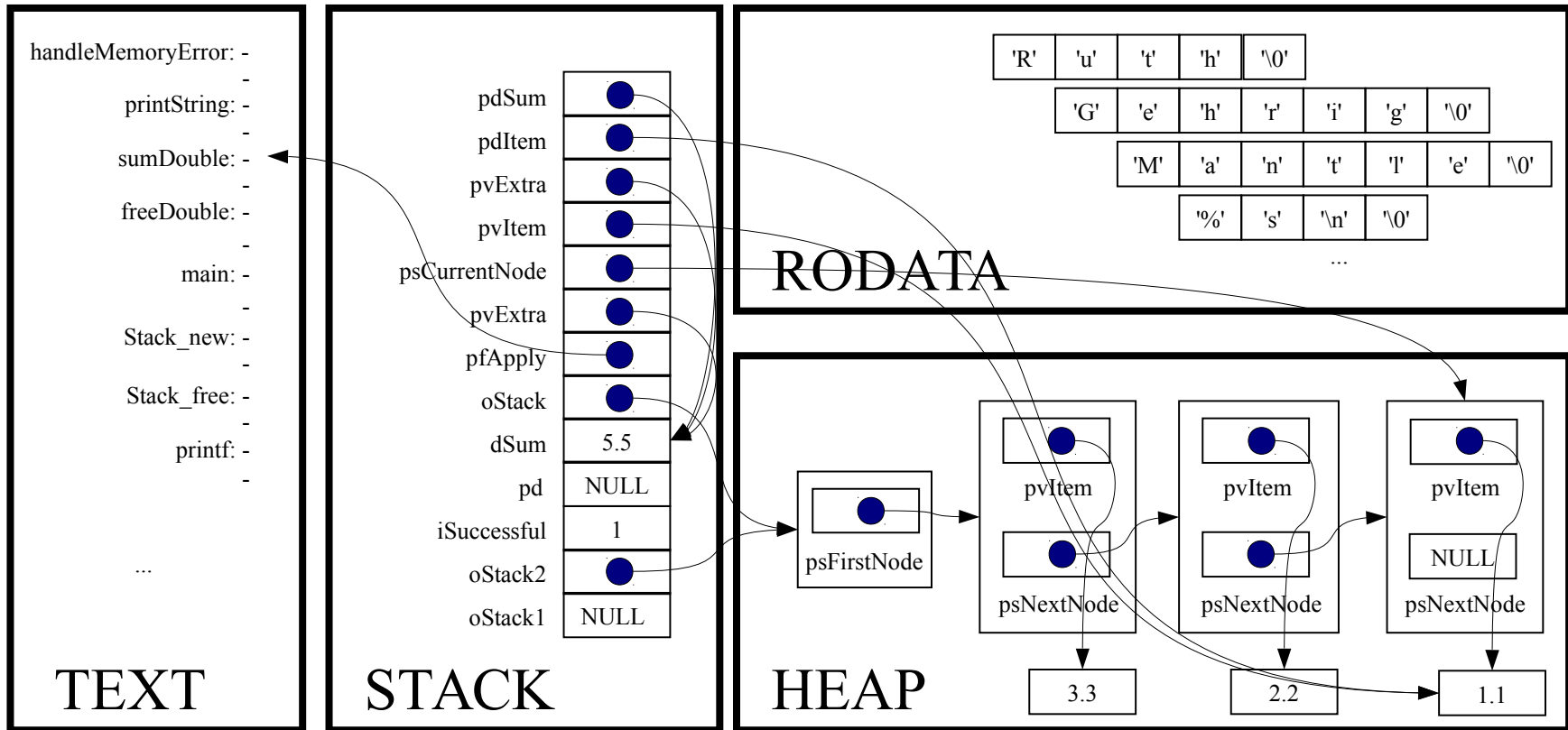
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```
pdItem = (double*)pvItem;
```



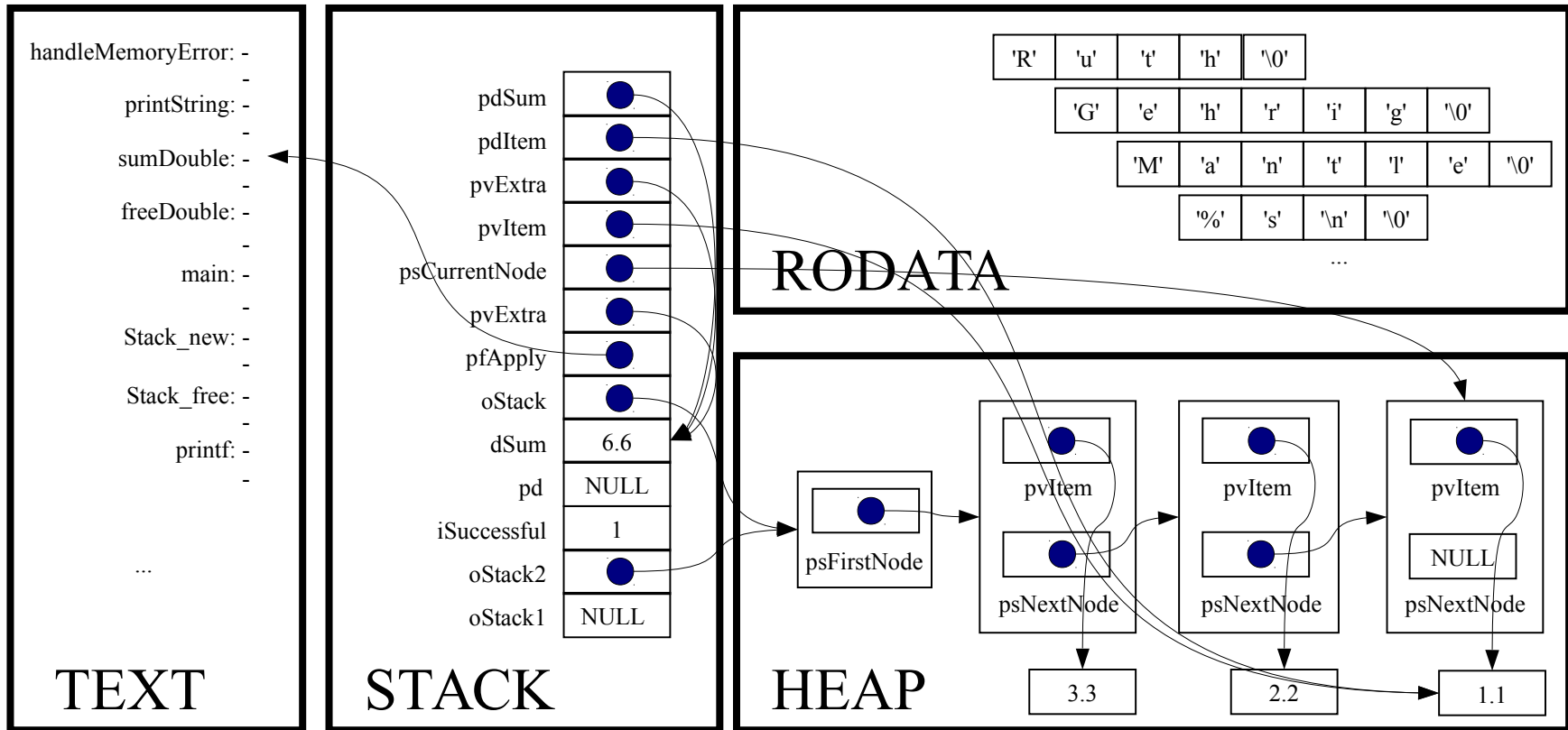
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```
pdSum = (double*)pvExtra;
```



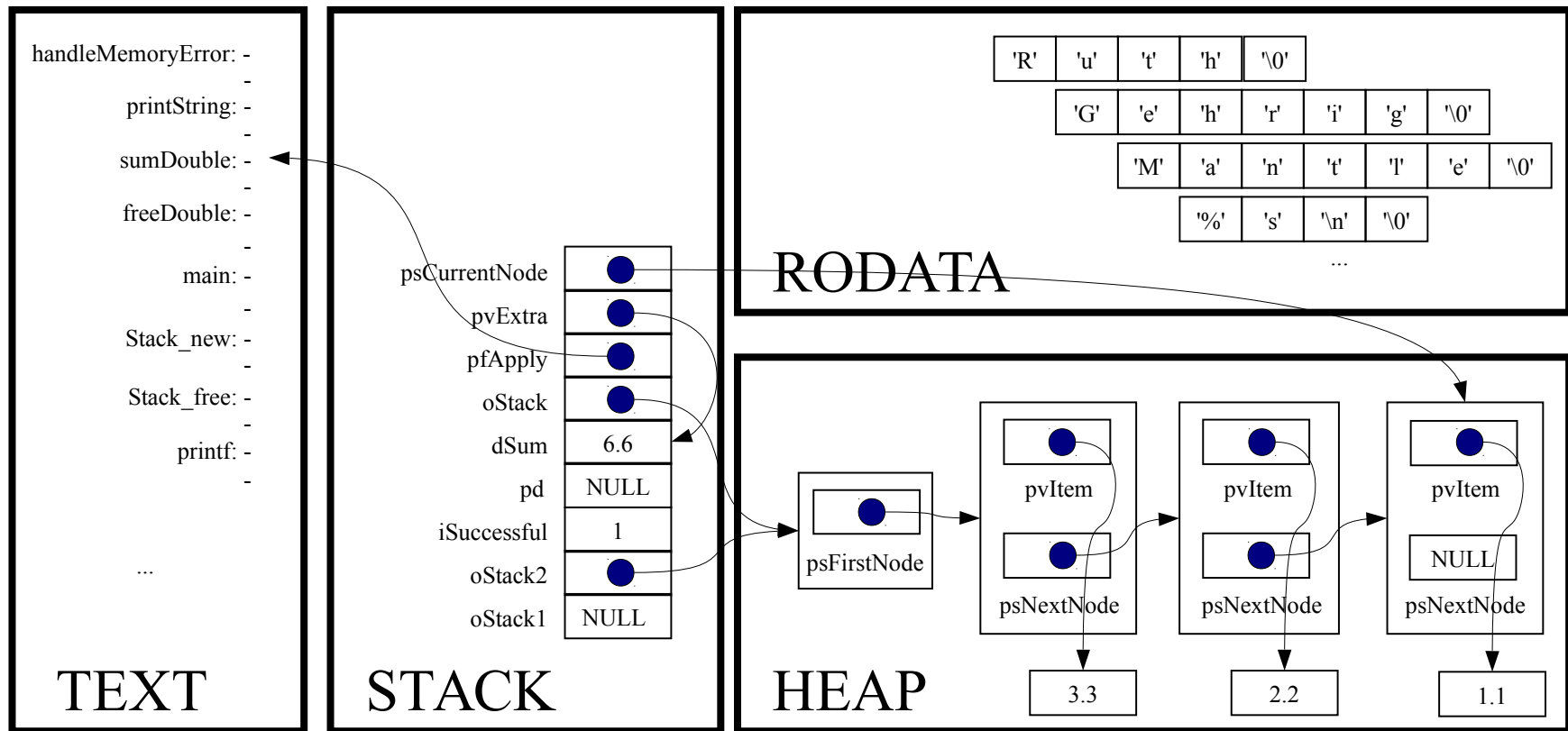
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```
*pdSum += *pdItem;
```



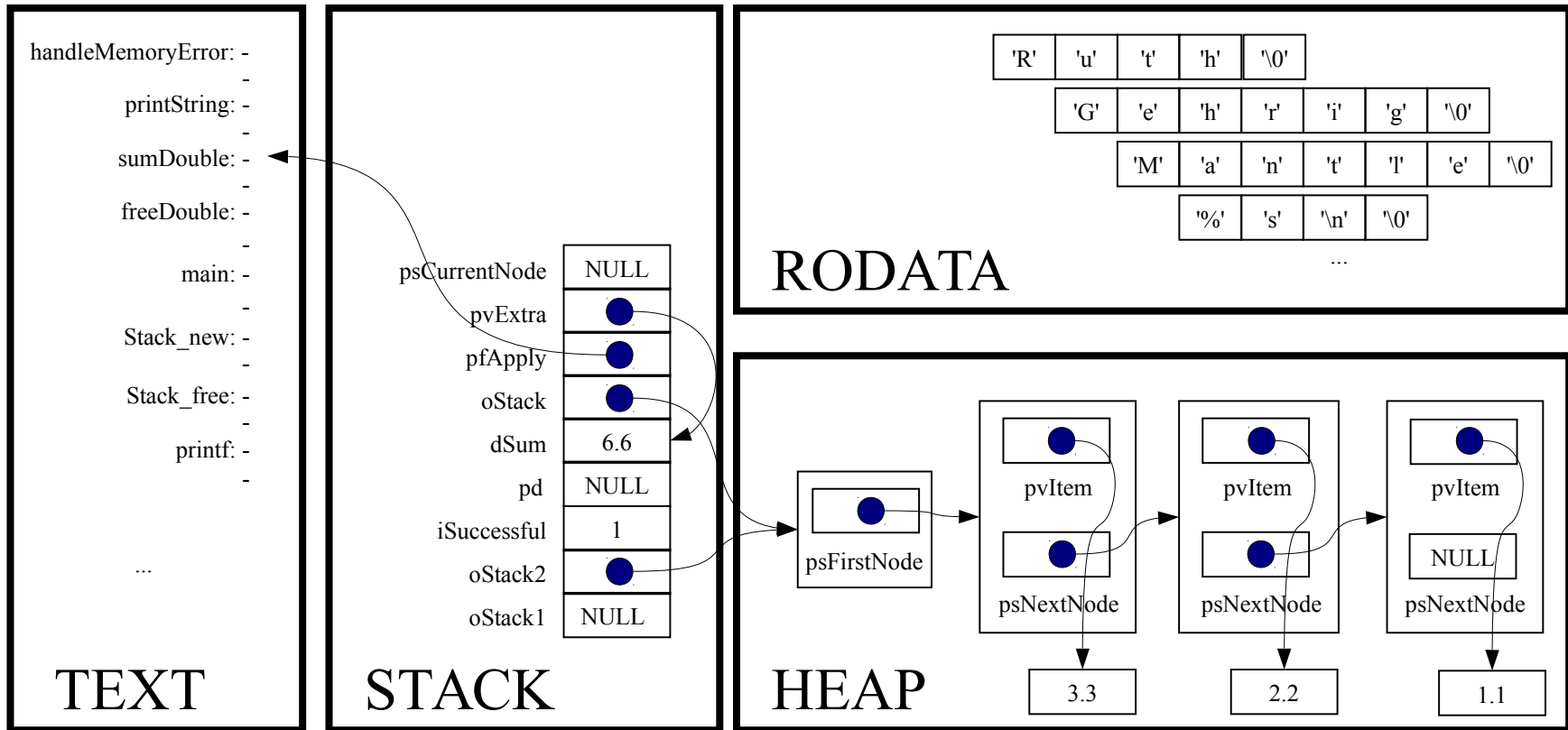
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Implicit return



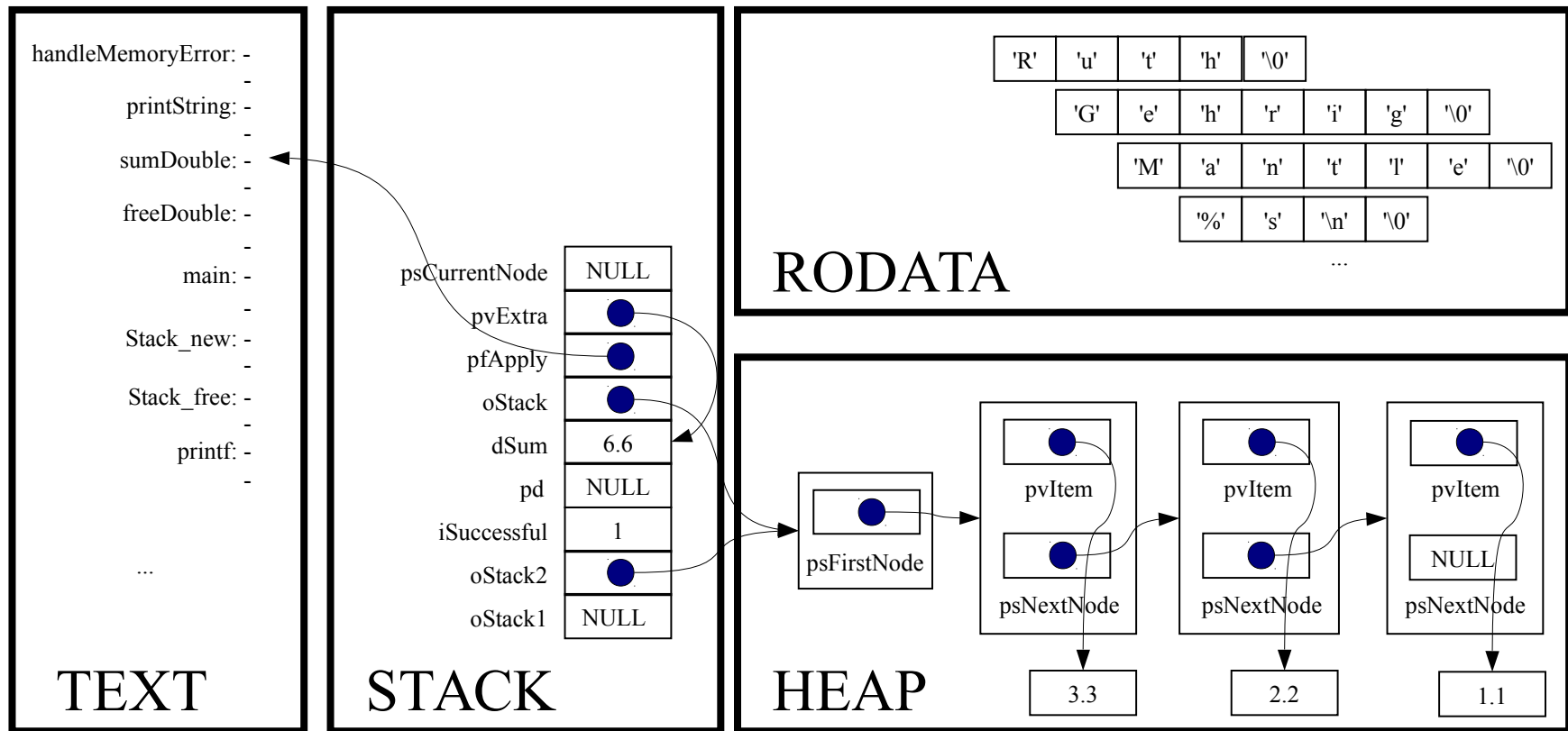
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



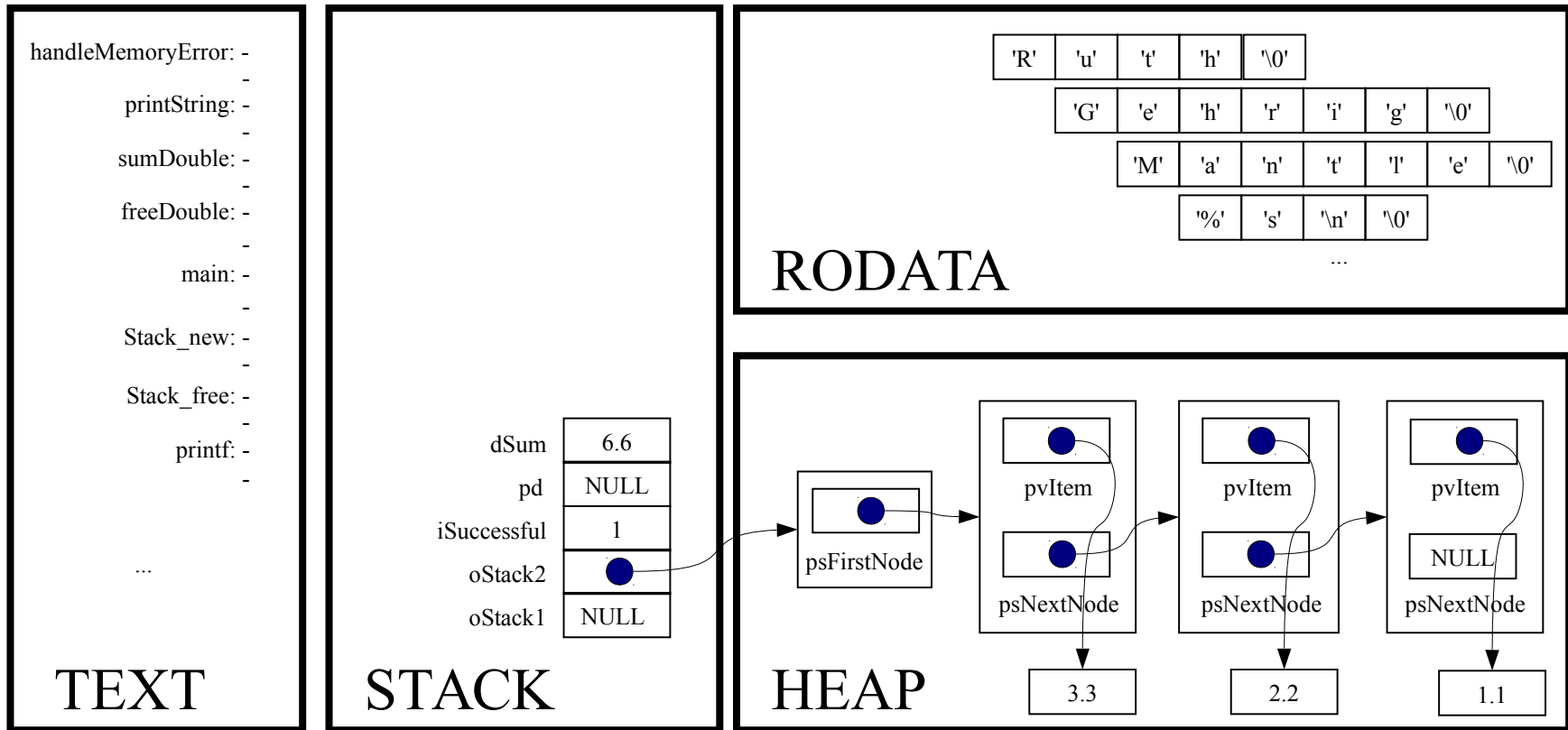
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



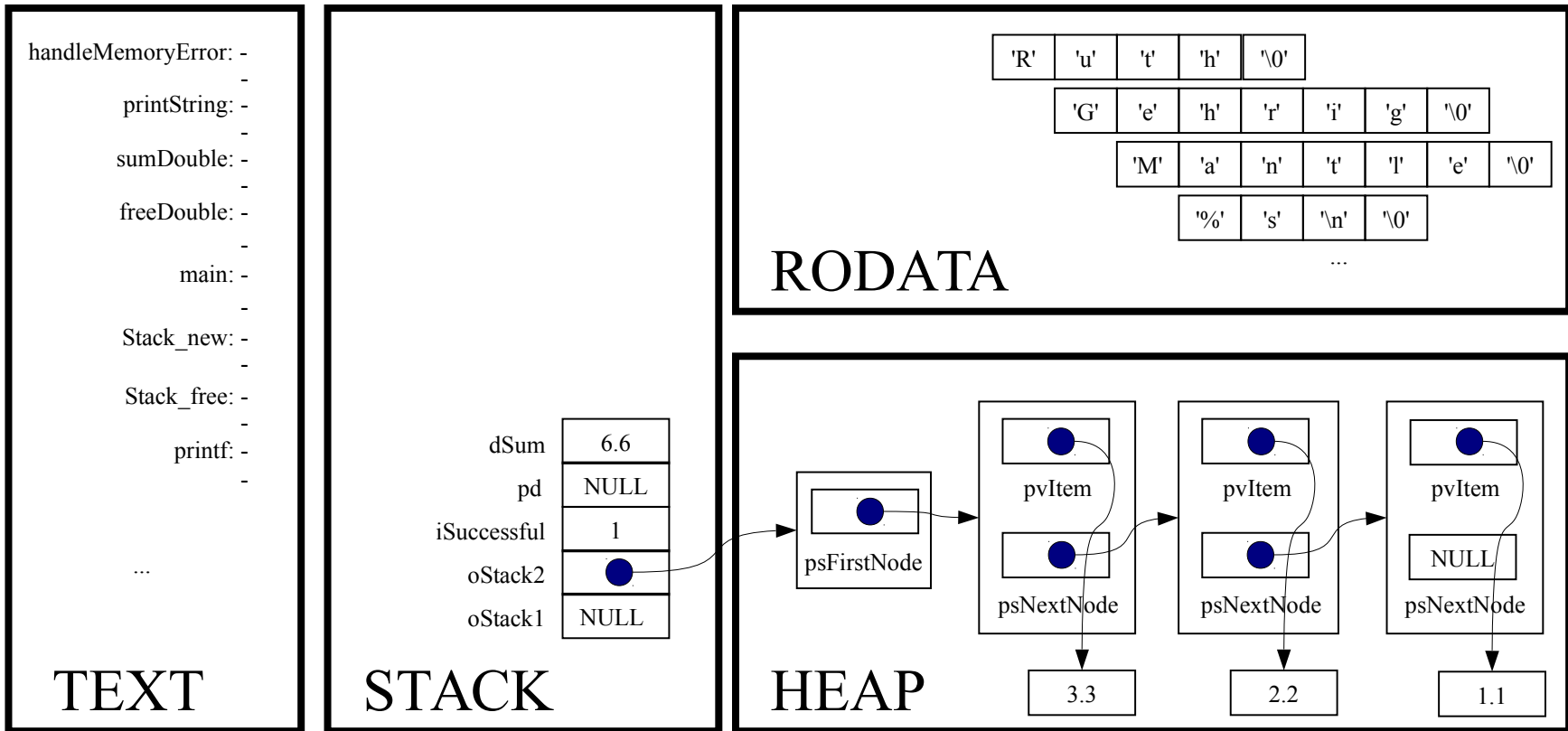
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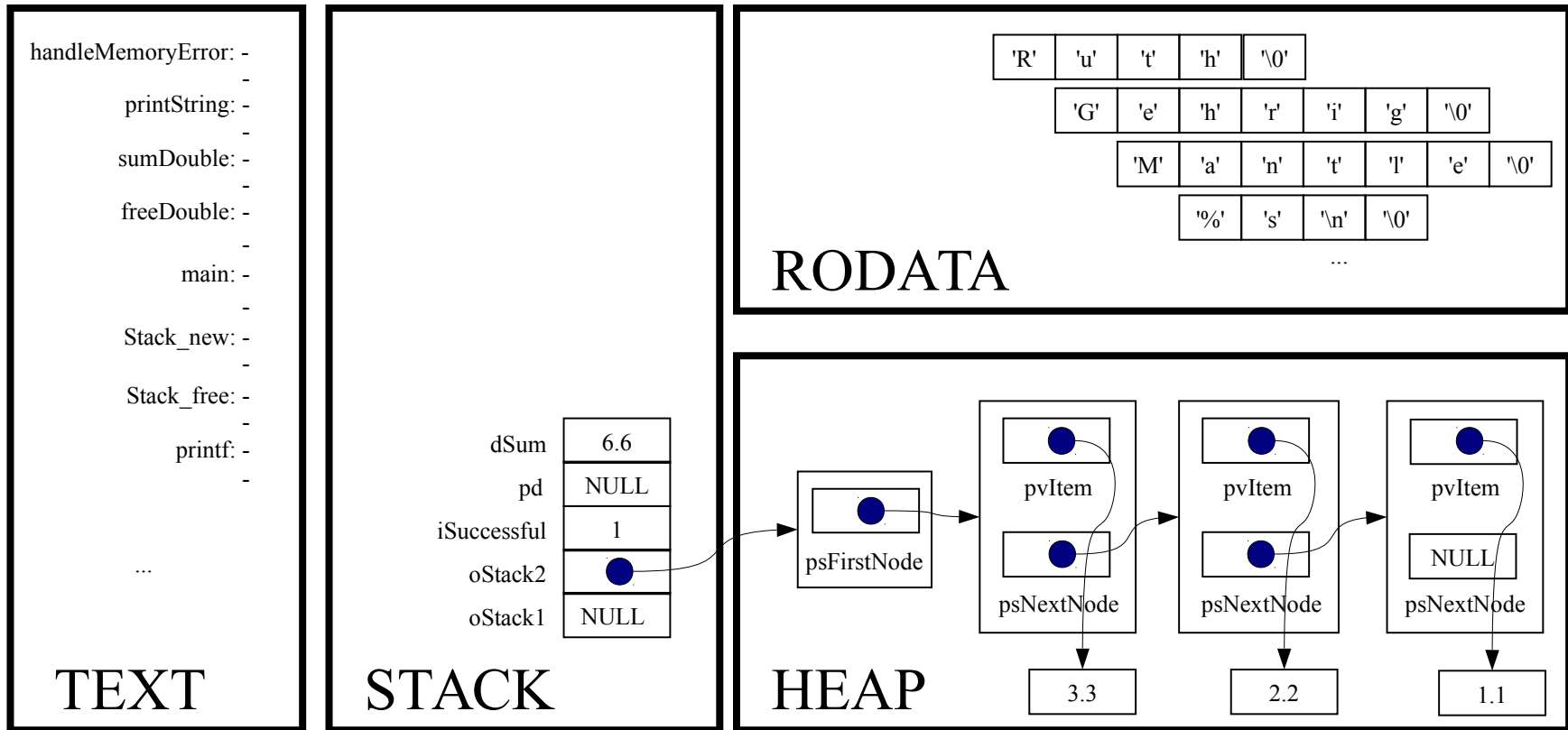
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```
printf("The sum is %g.\n", dSum);
```



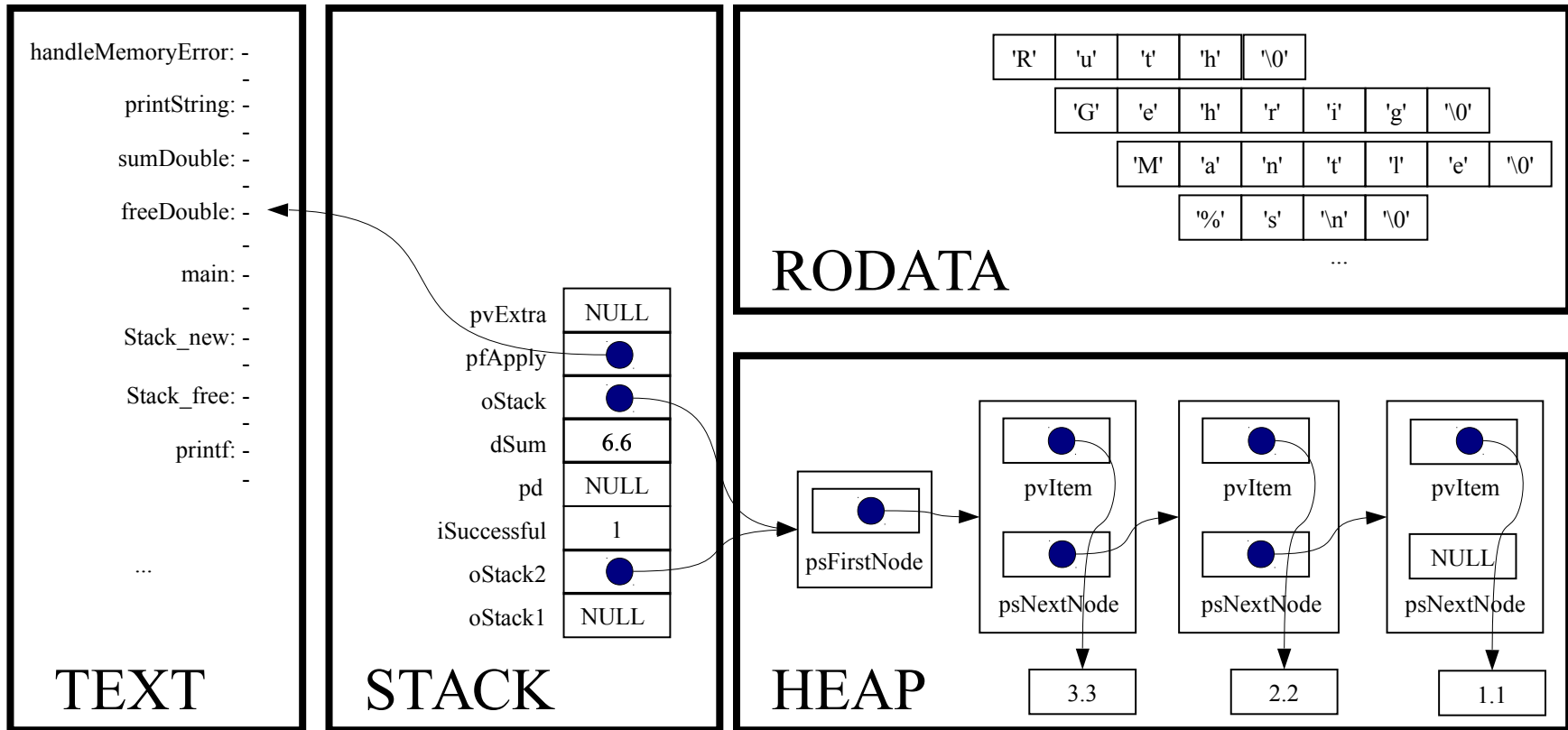
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```
Stack_map(oStack2, freeDouble, NULL);
```



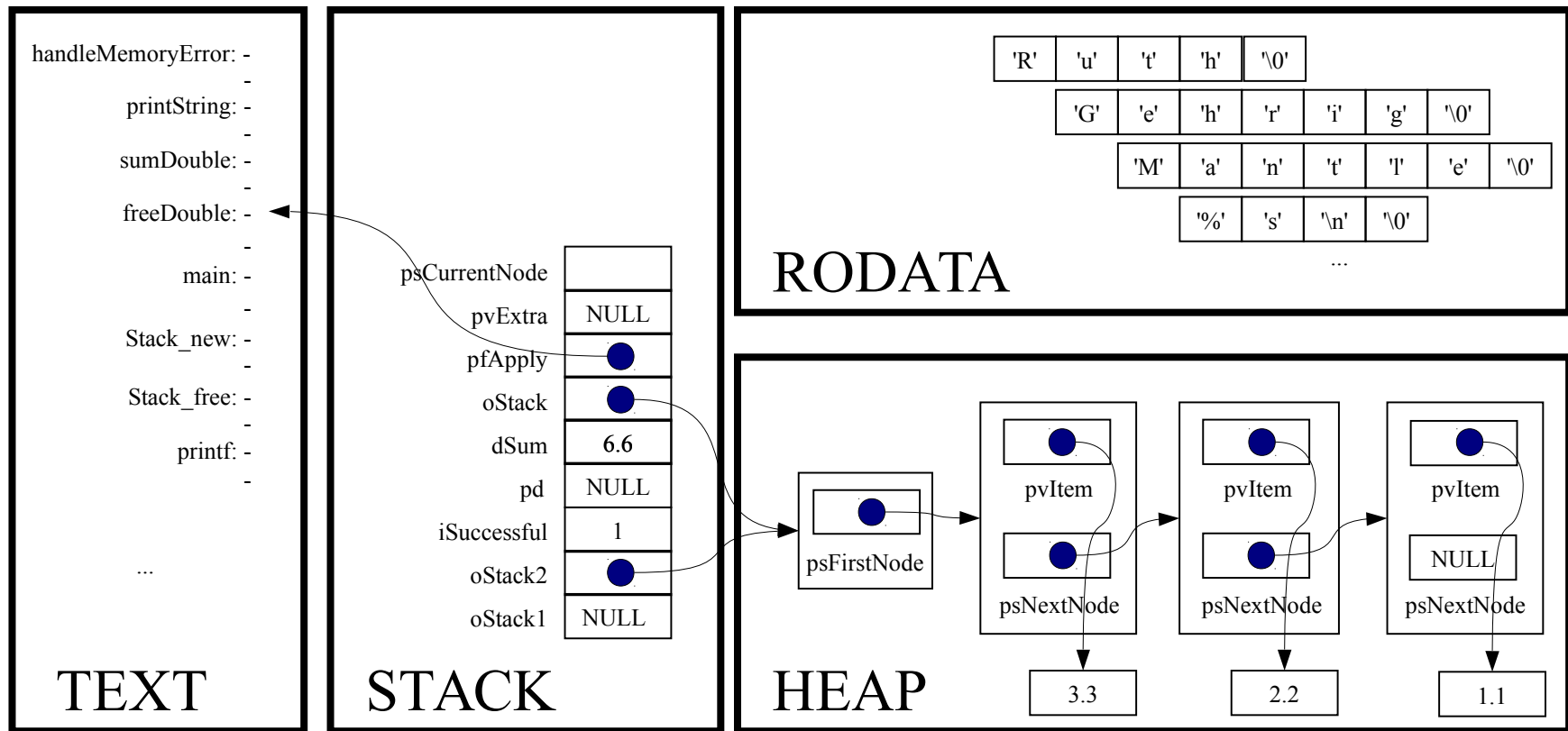
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```
void Stack_map(Stack_T oStack,
              void (*pfApply)(void *pvItem, void *pvExtra),
              const void *pvExtra)
```



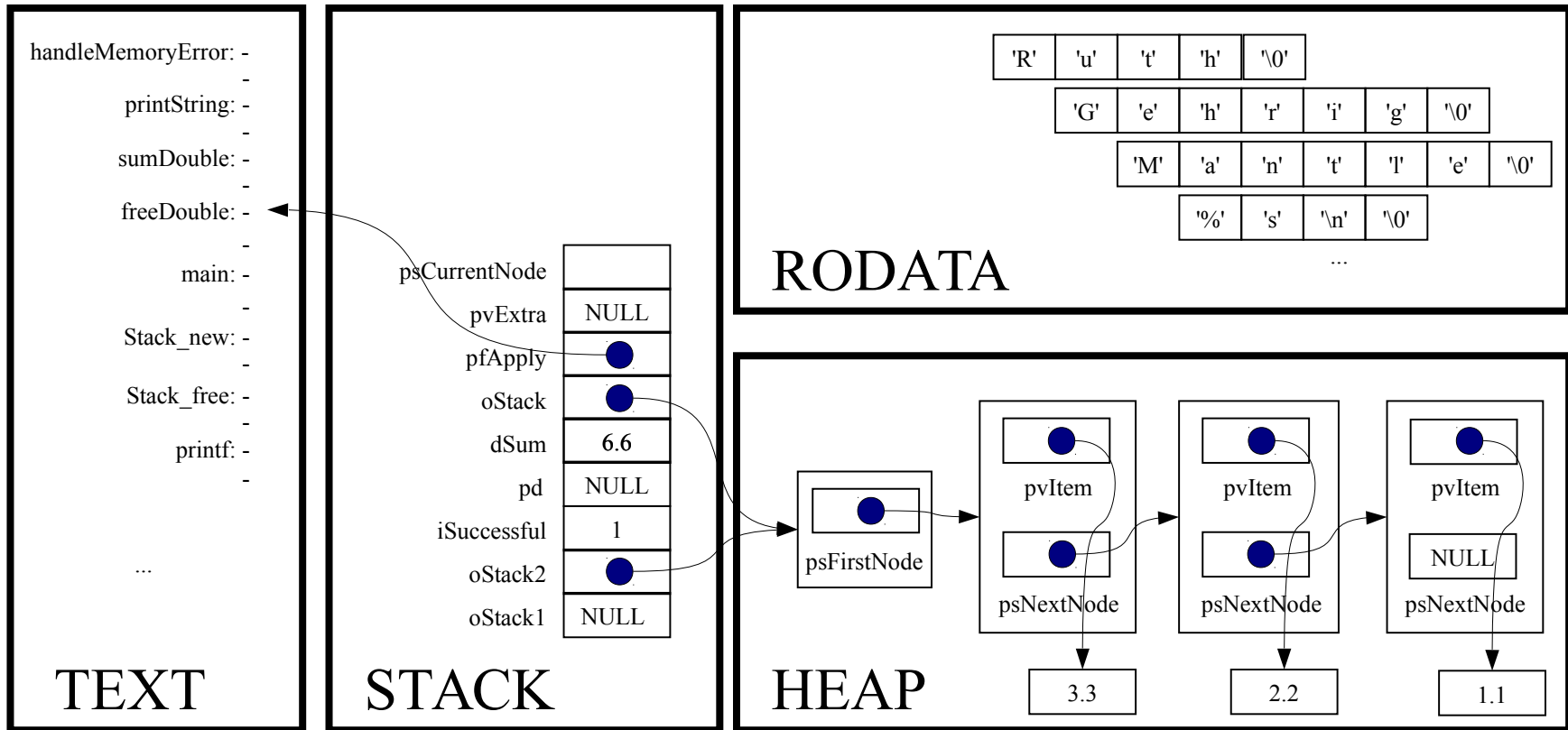
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```
struct StackNode *psCurrentNode;
```



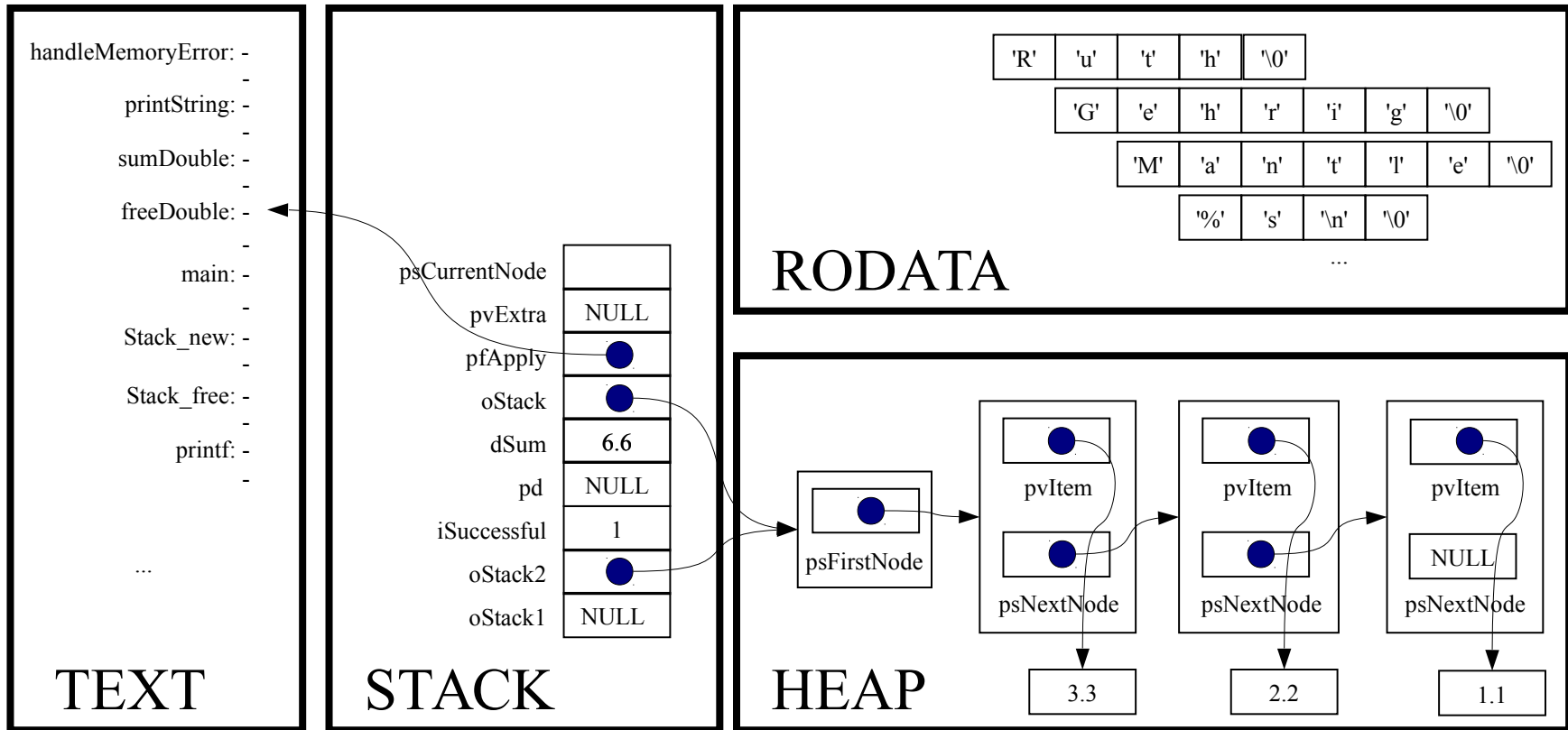
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```
assert(oStack != NULL);
```



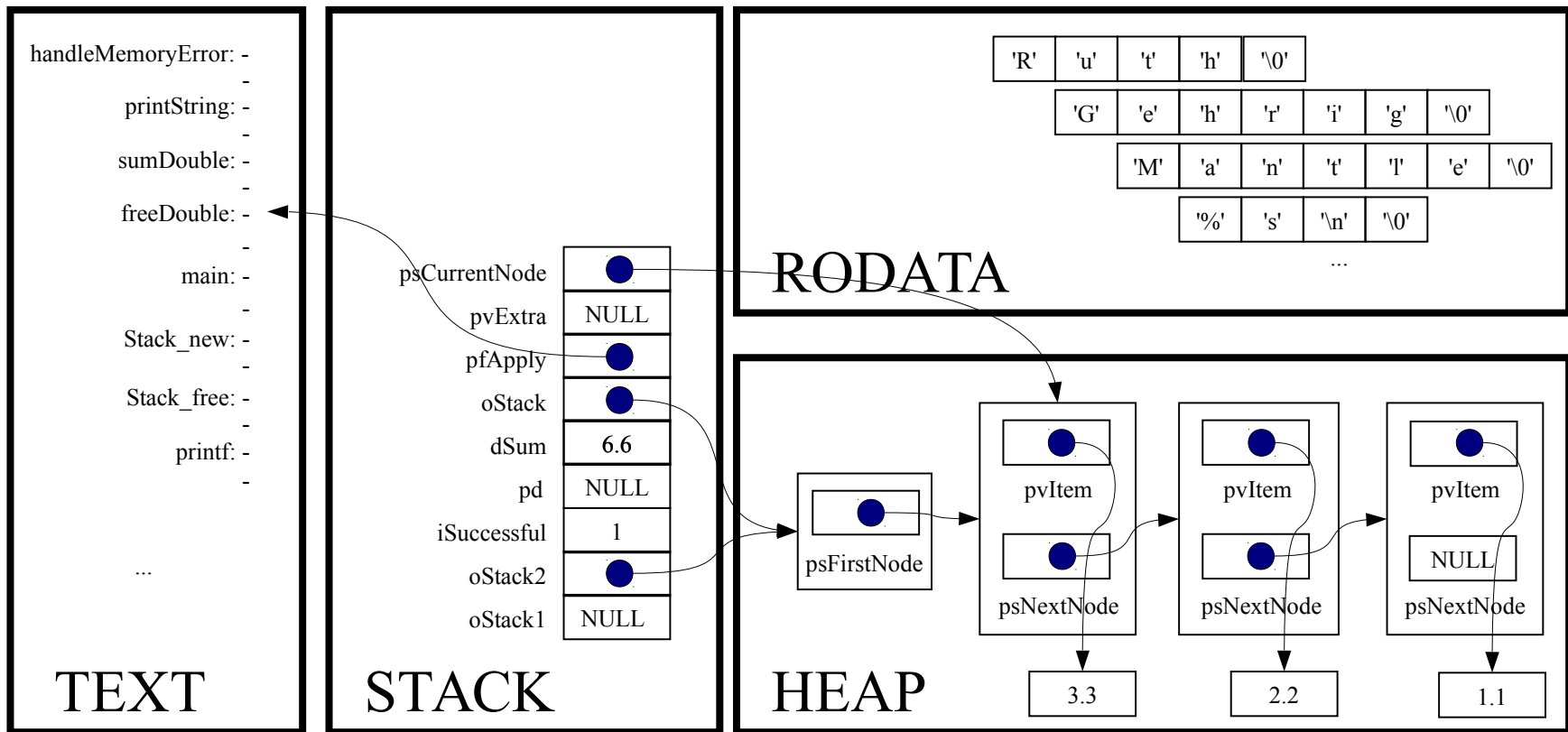
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```
assert(pfApply != NULL);
```



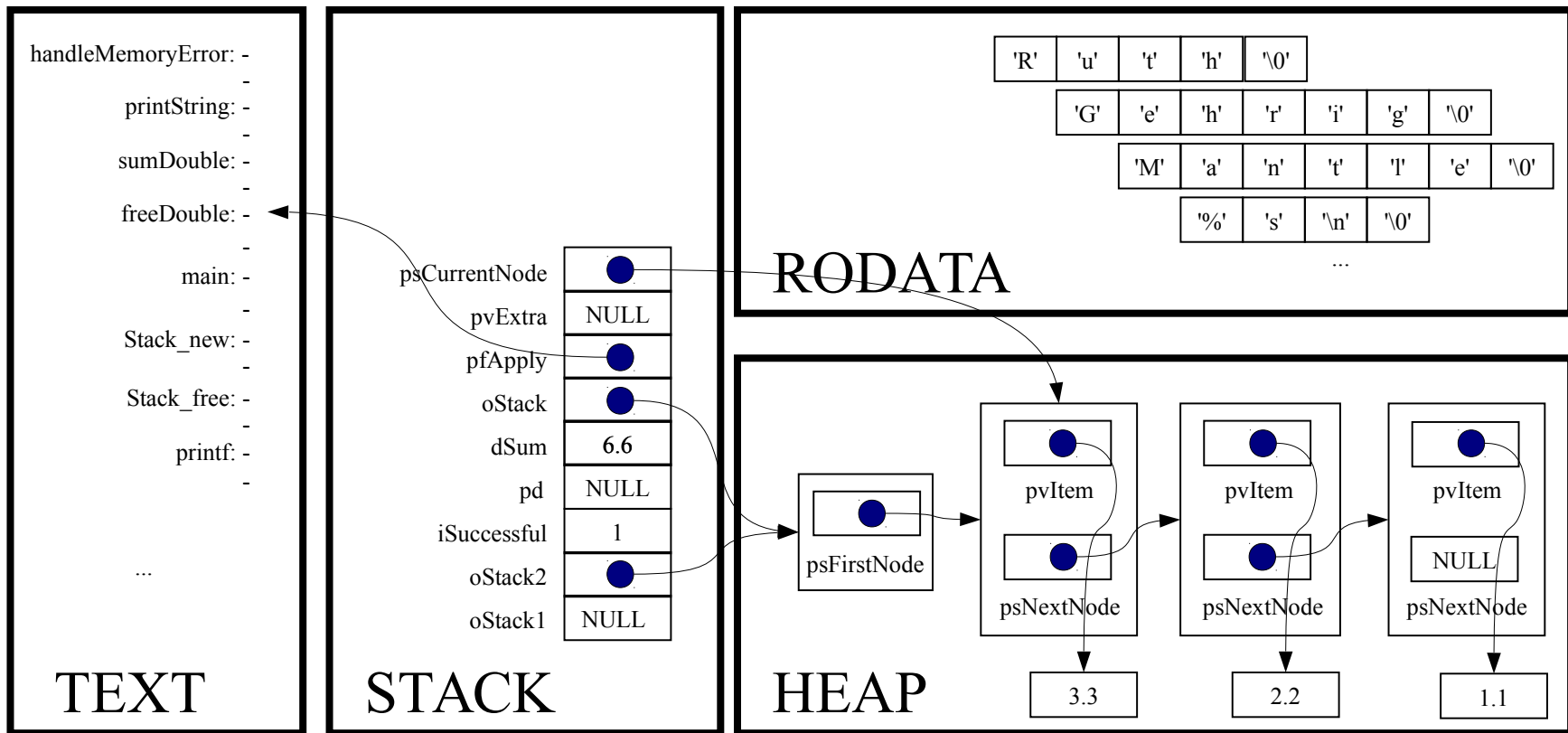
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



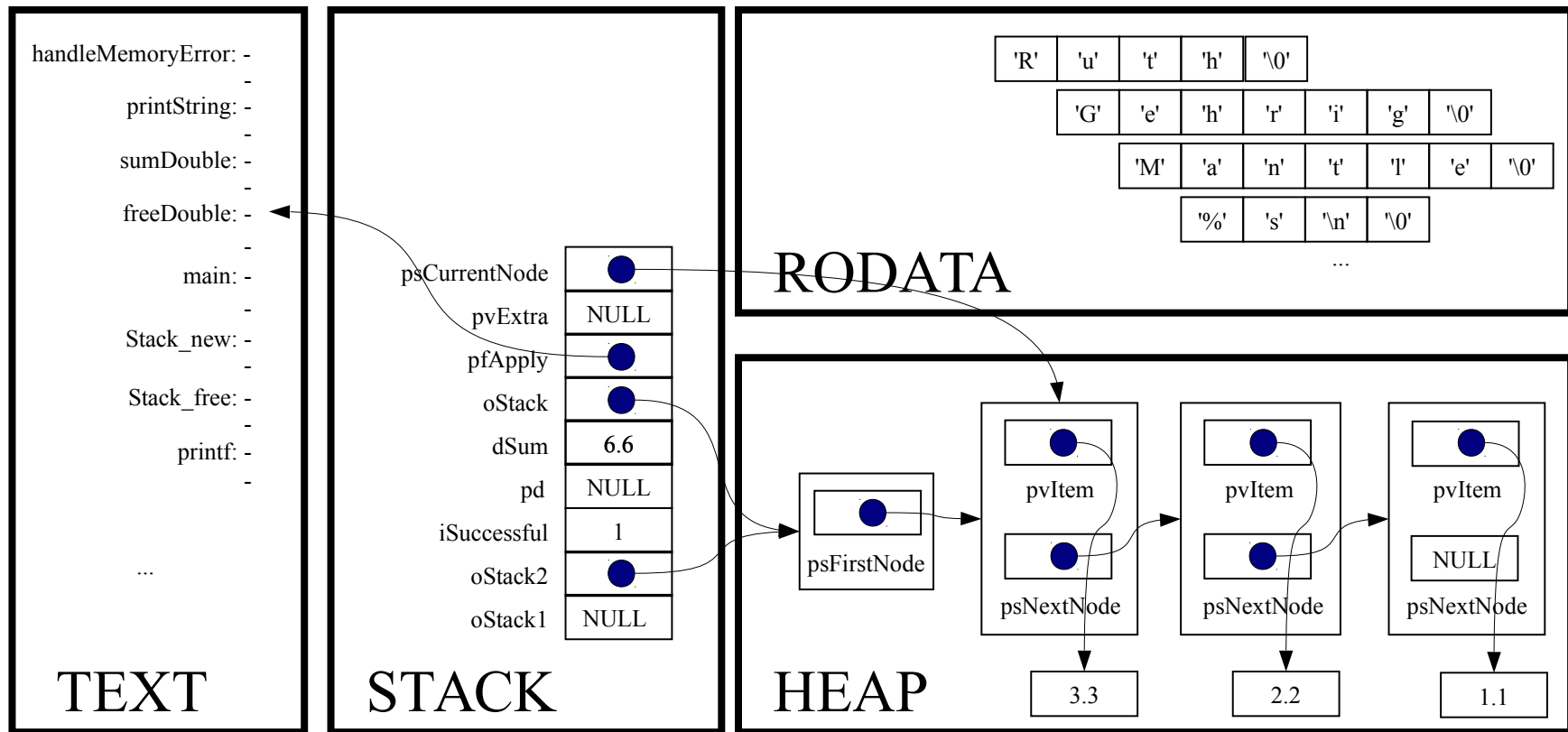
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



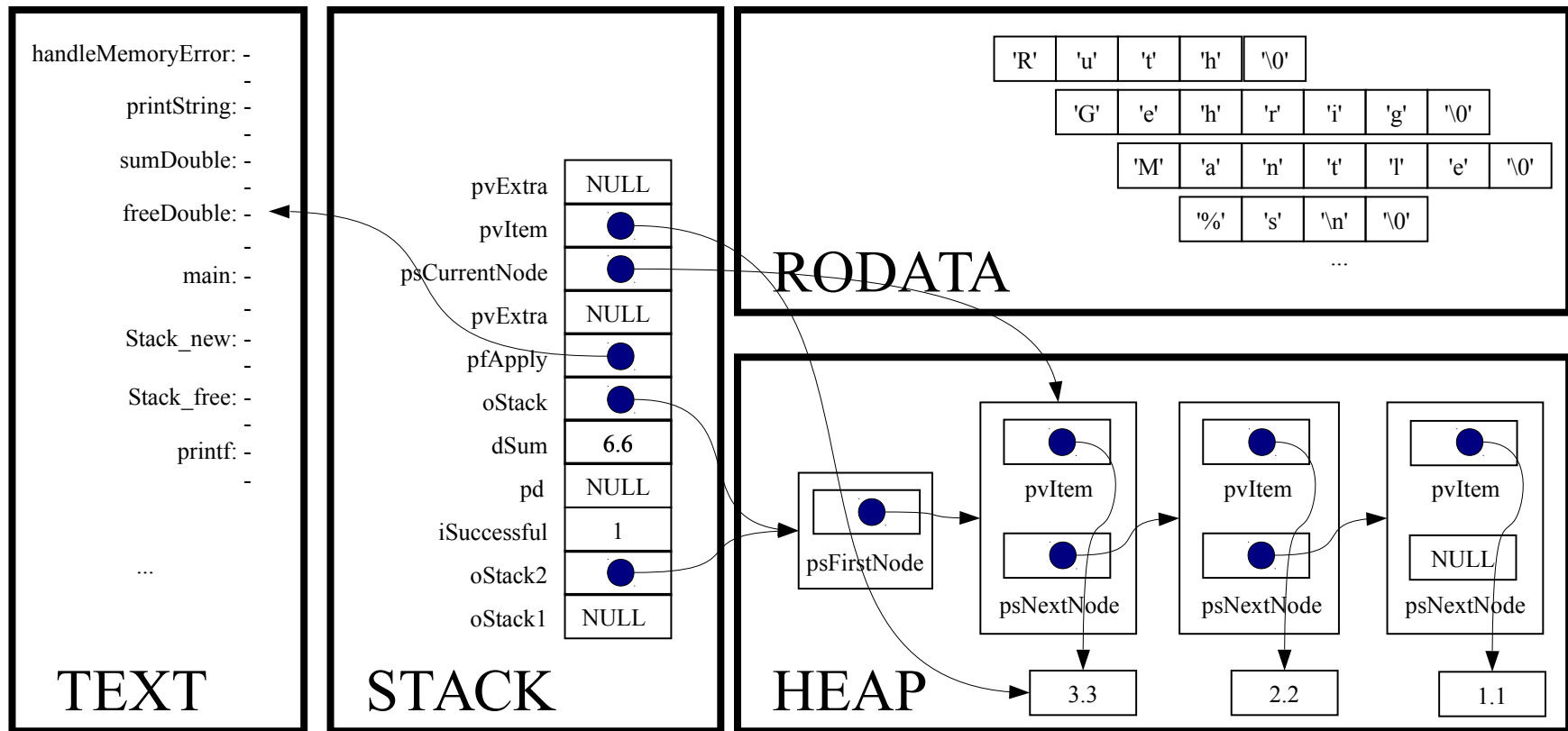
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```
(*pfApply)((void*)psCurrentNode->pvItem, (void*)pvExtra);
```



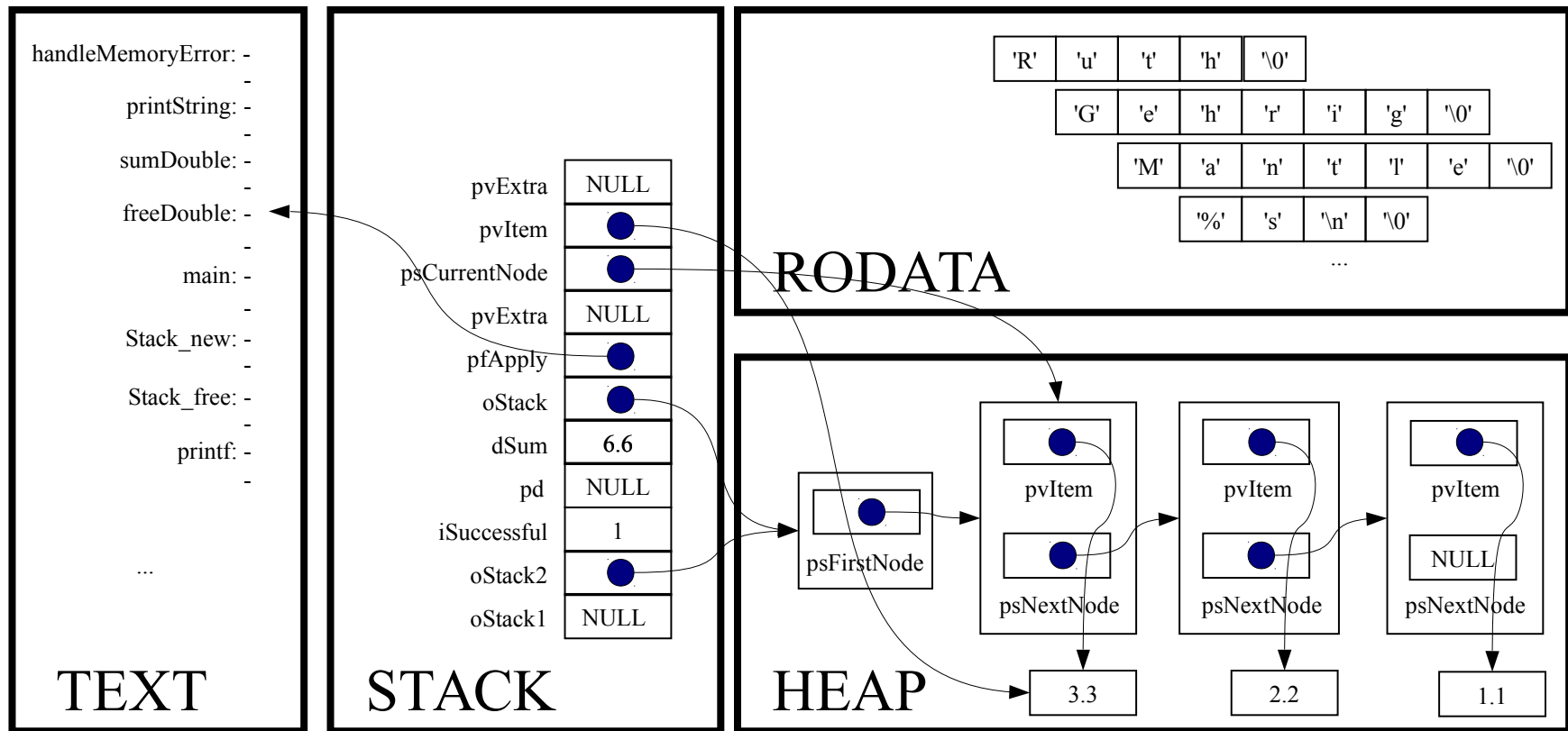
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```
static void freeDouble(void *pvItem, void *pvExtra)
```



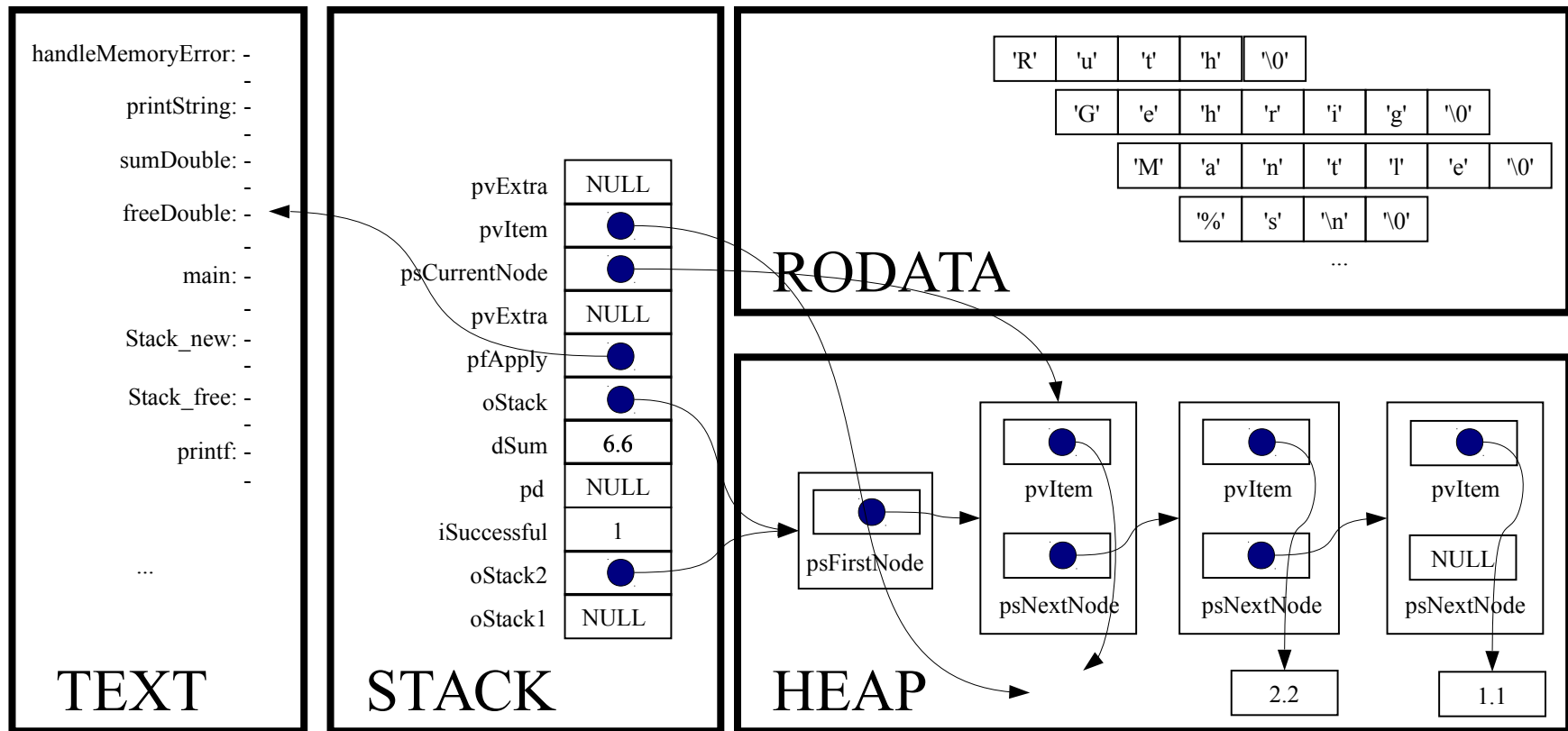
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```
assert(pvItem != NULL);
```



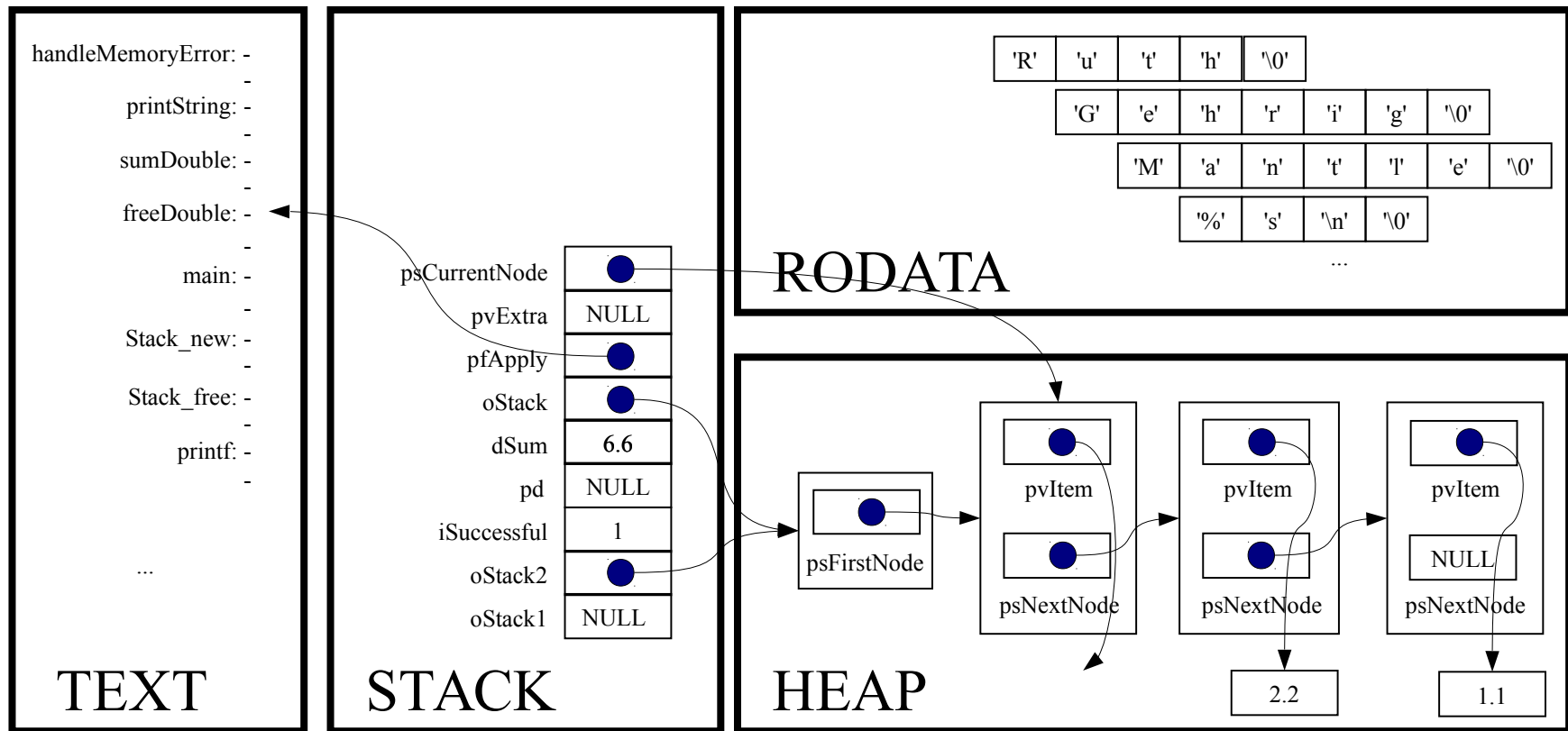
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```
free(pvItem);
```



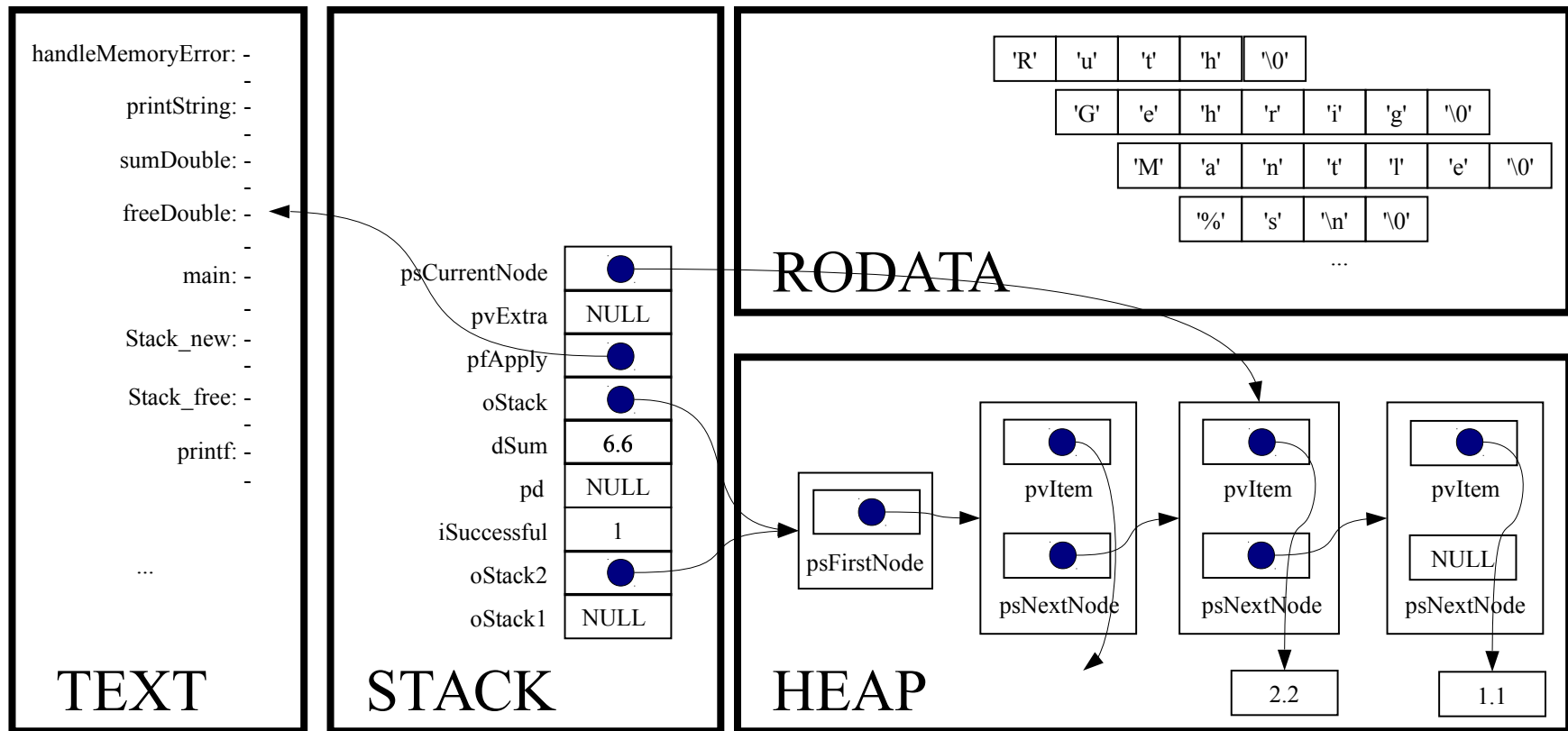
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Implicit return



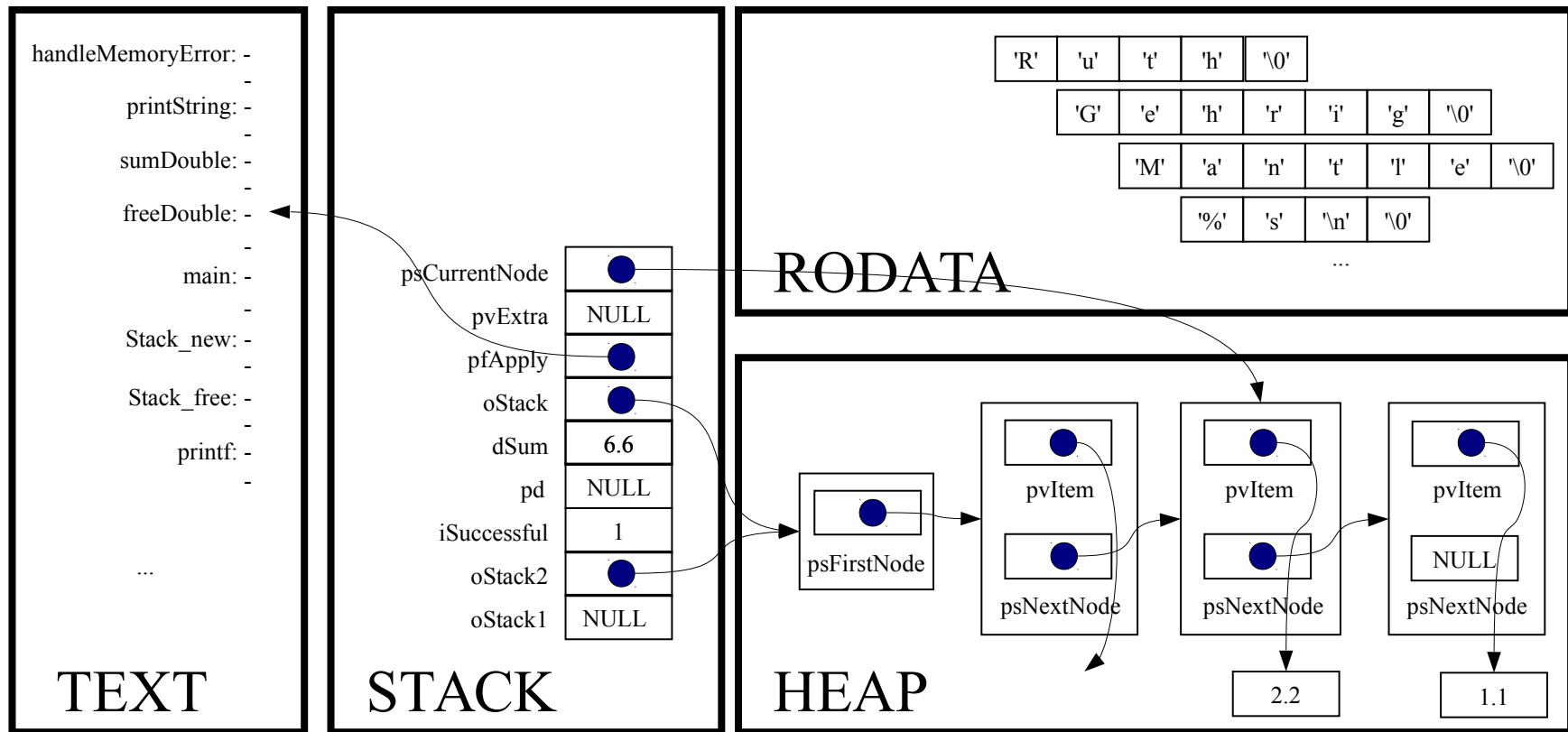
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



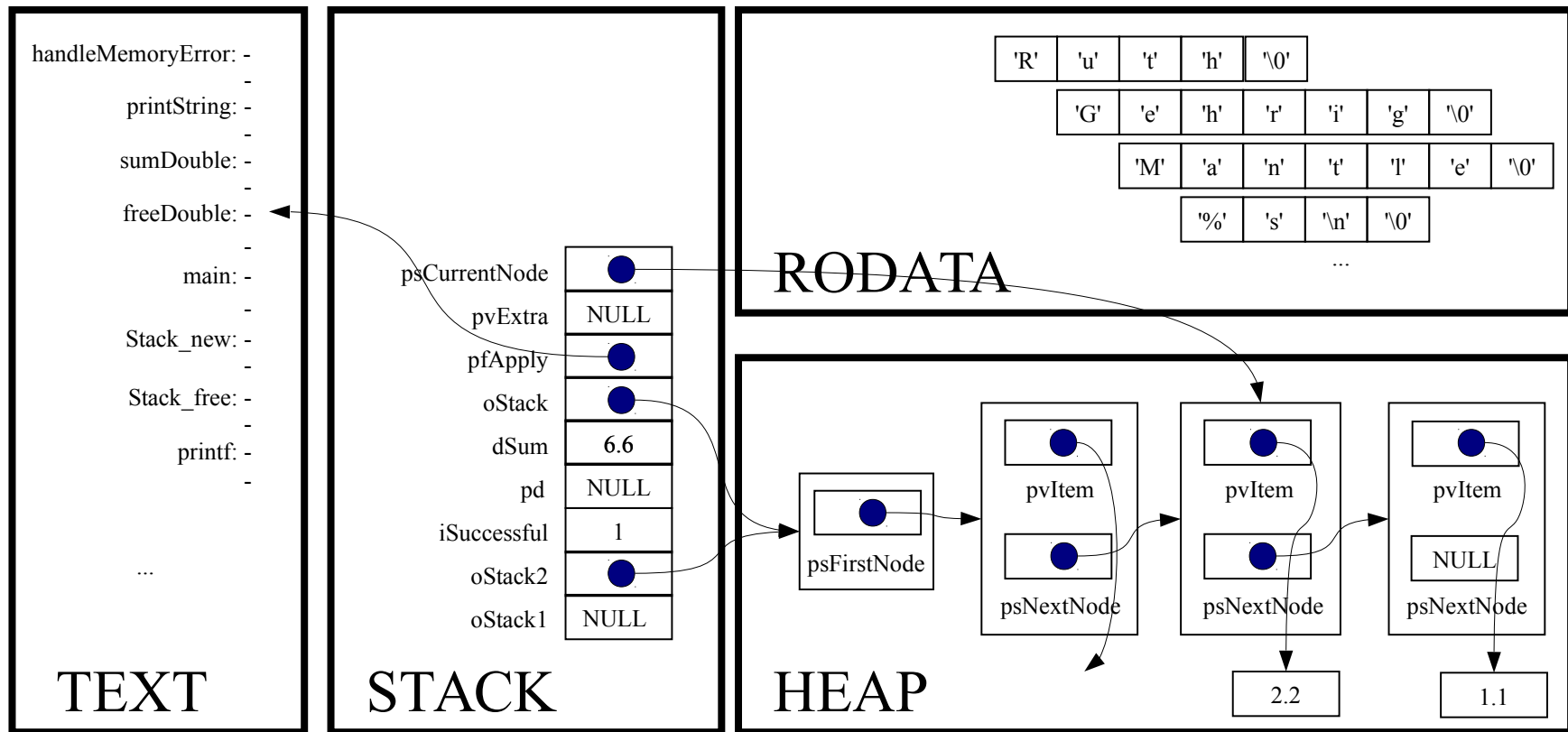
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```
for (psCurrentNode = oStack->psFirstNode;  
    psCurrentNode != NULL;  
    psCurrentNode = psCurrentNode->psNextNode)
```



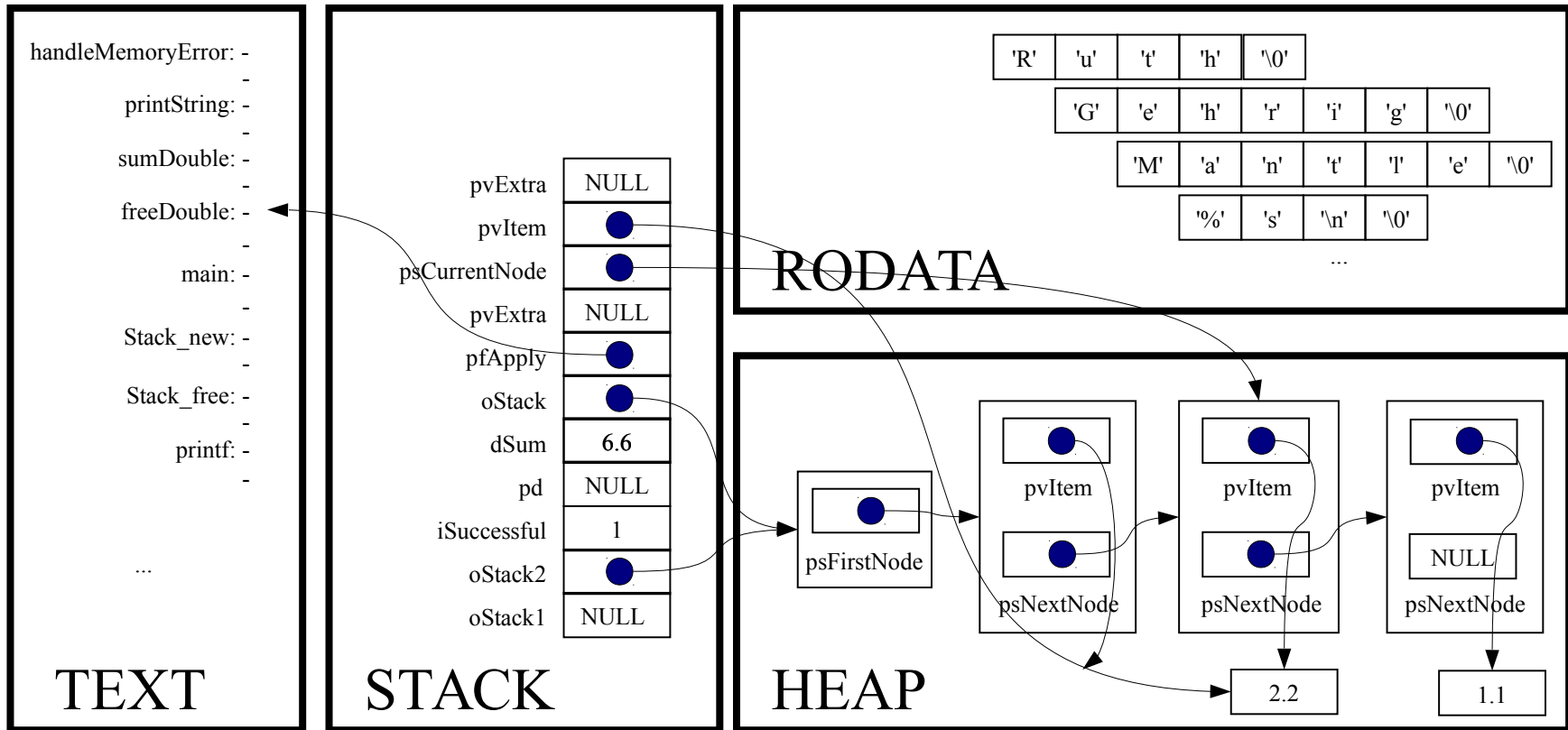
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```
(*pfApply)((void*)psCurrentNode->pvItem, (void*)pvExtra);
```



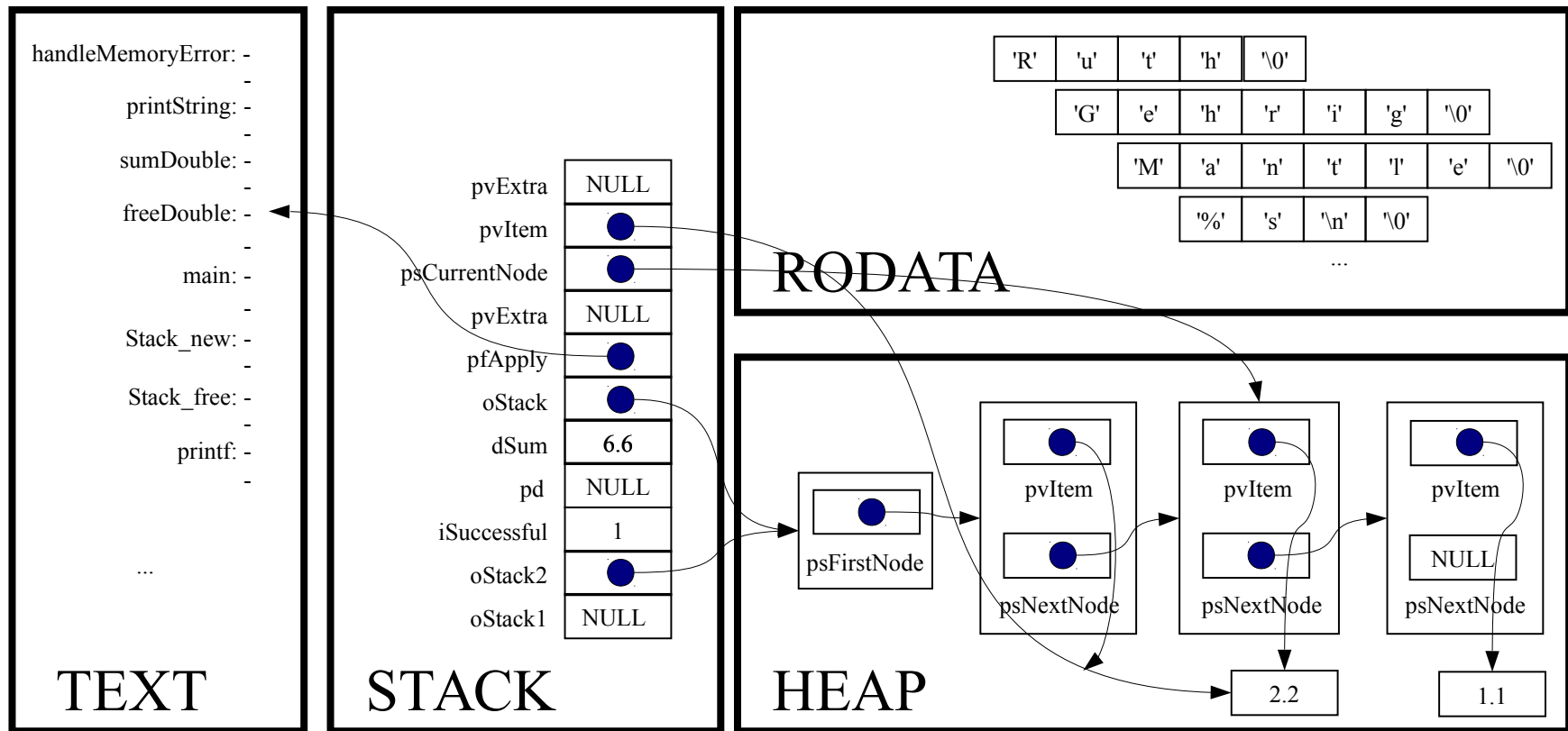
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```
static void freeDouble(void *pvItem, void *pvExtra)
```



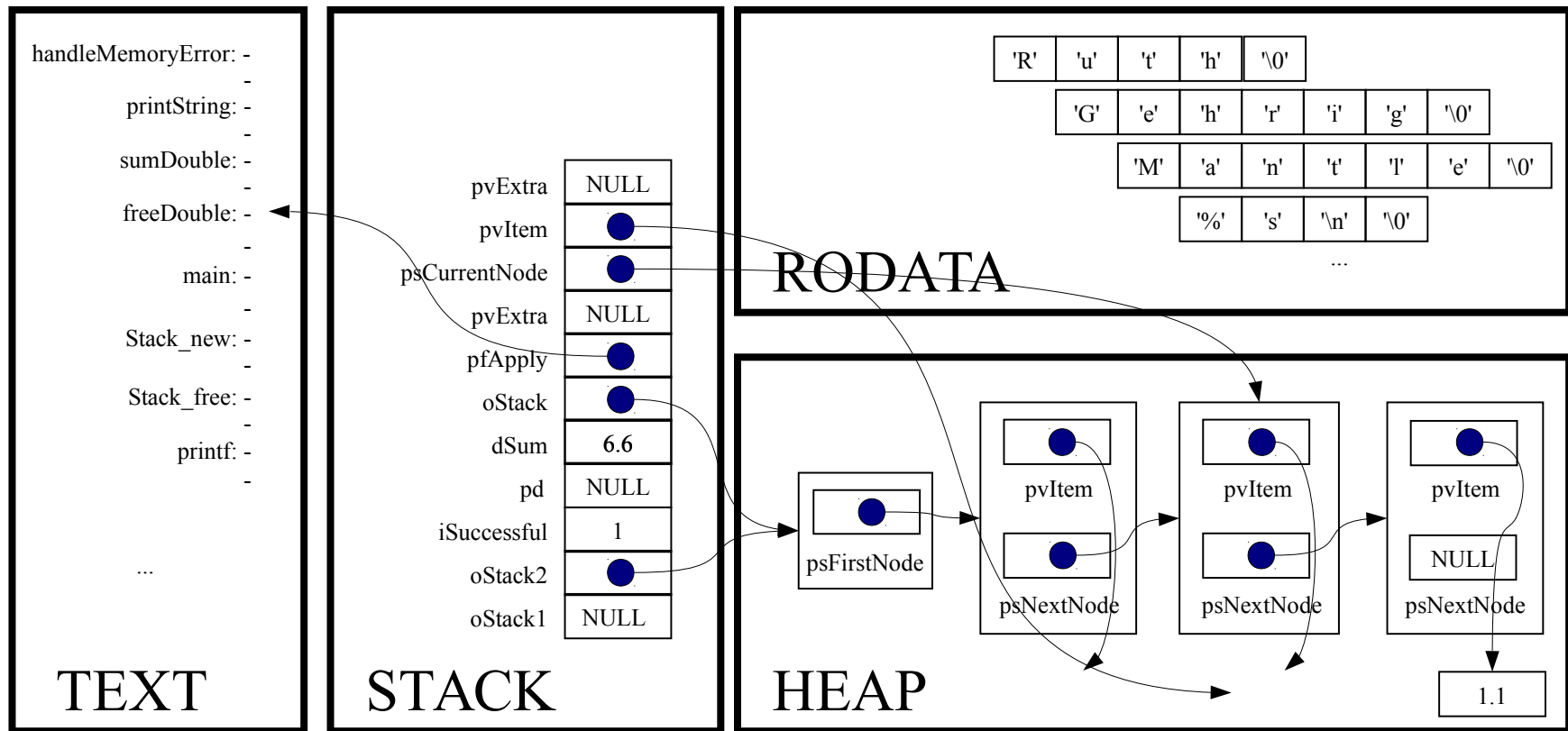
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```
assert(pvItem != NULL);
```



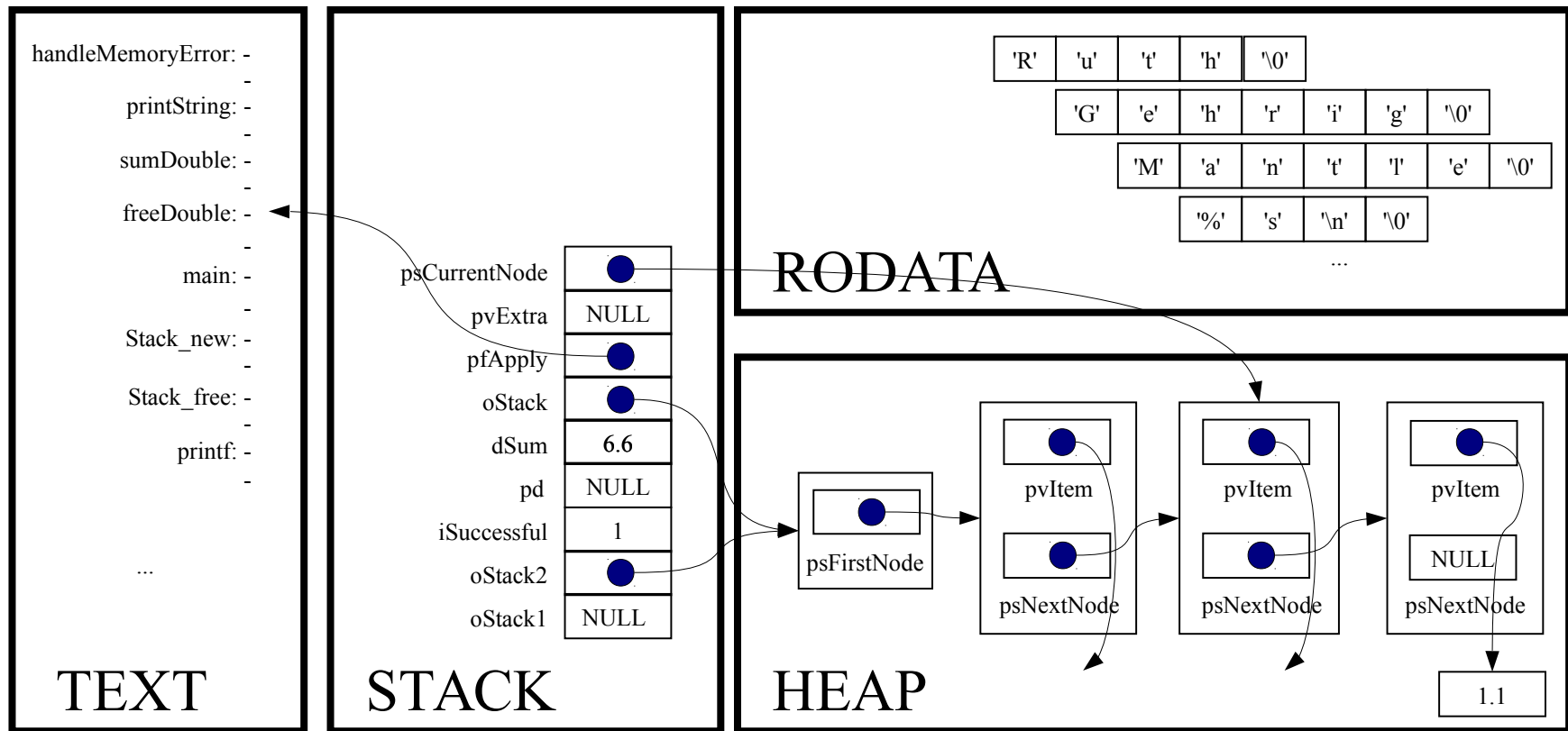
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```
free(pvItem);
```



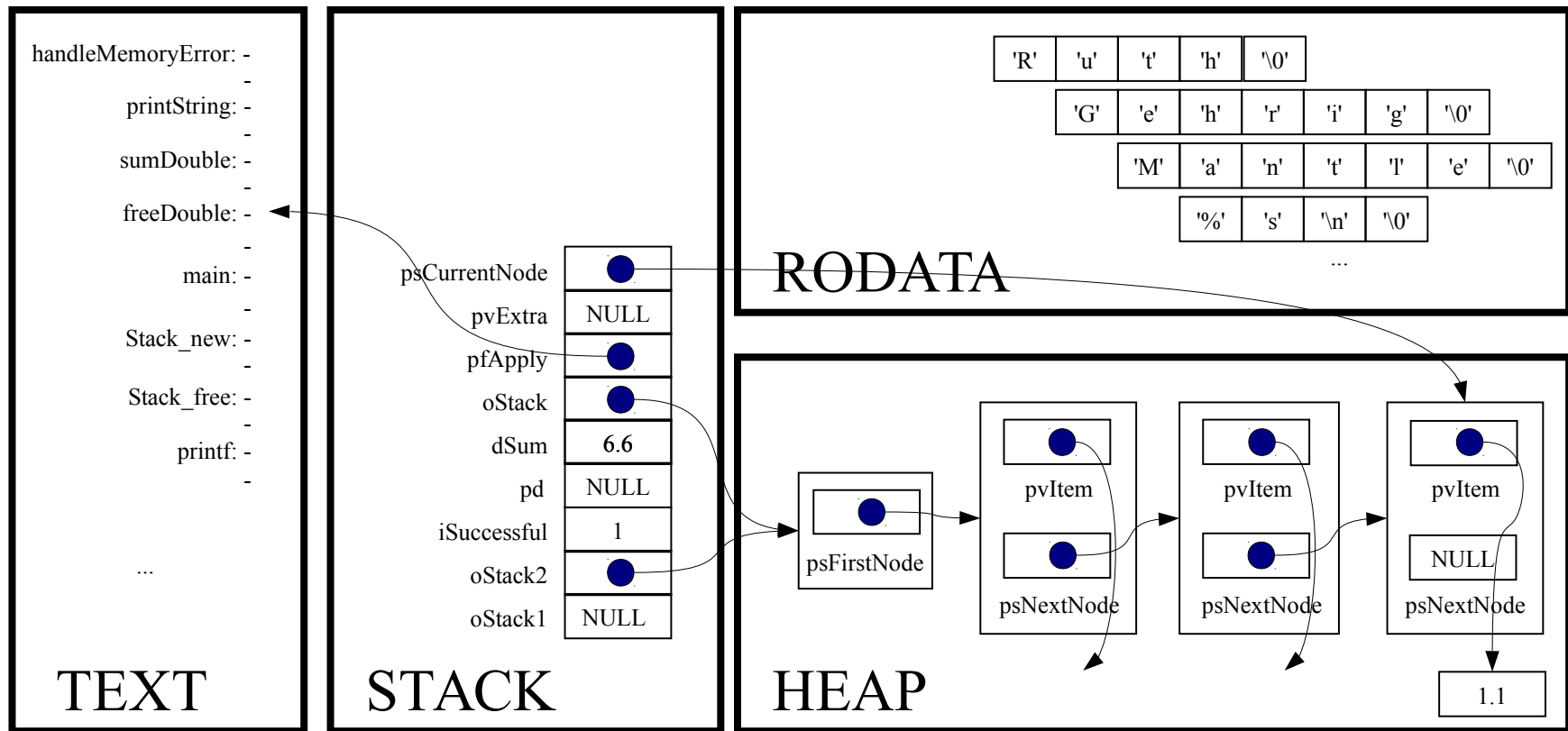
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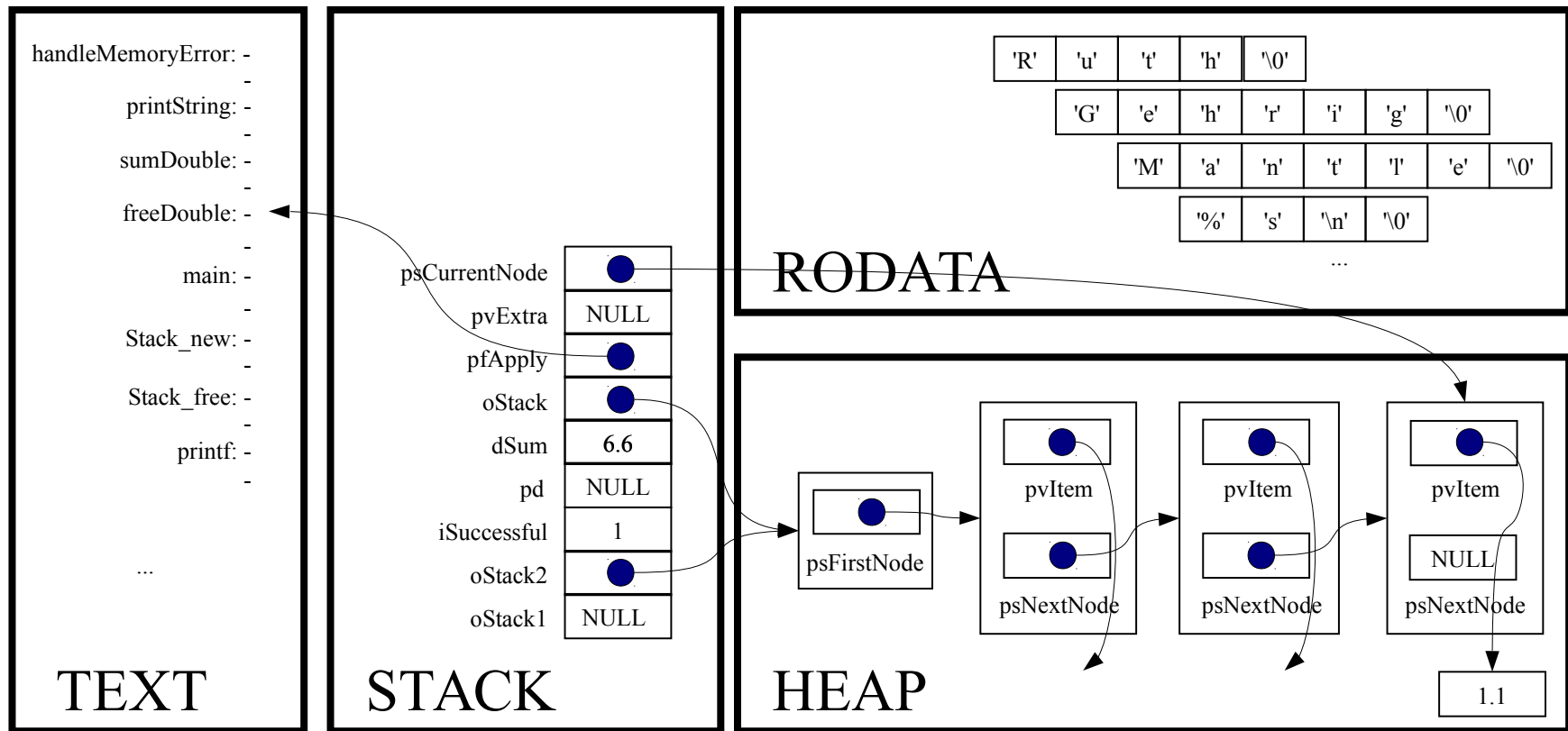
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



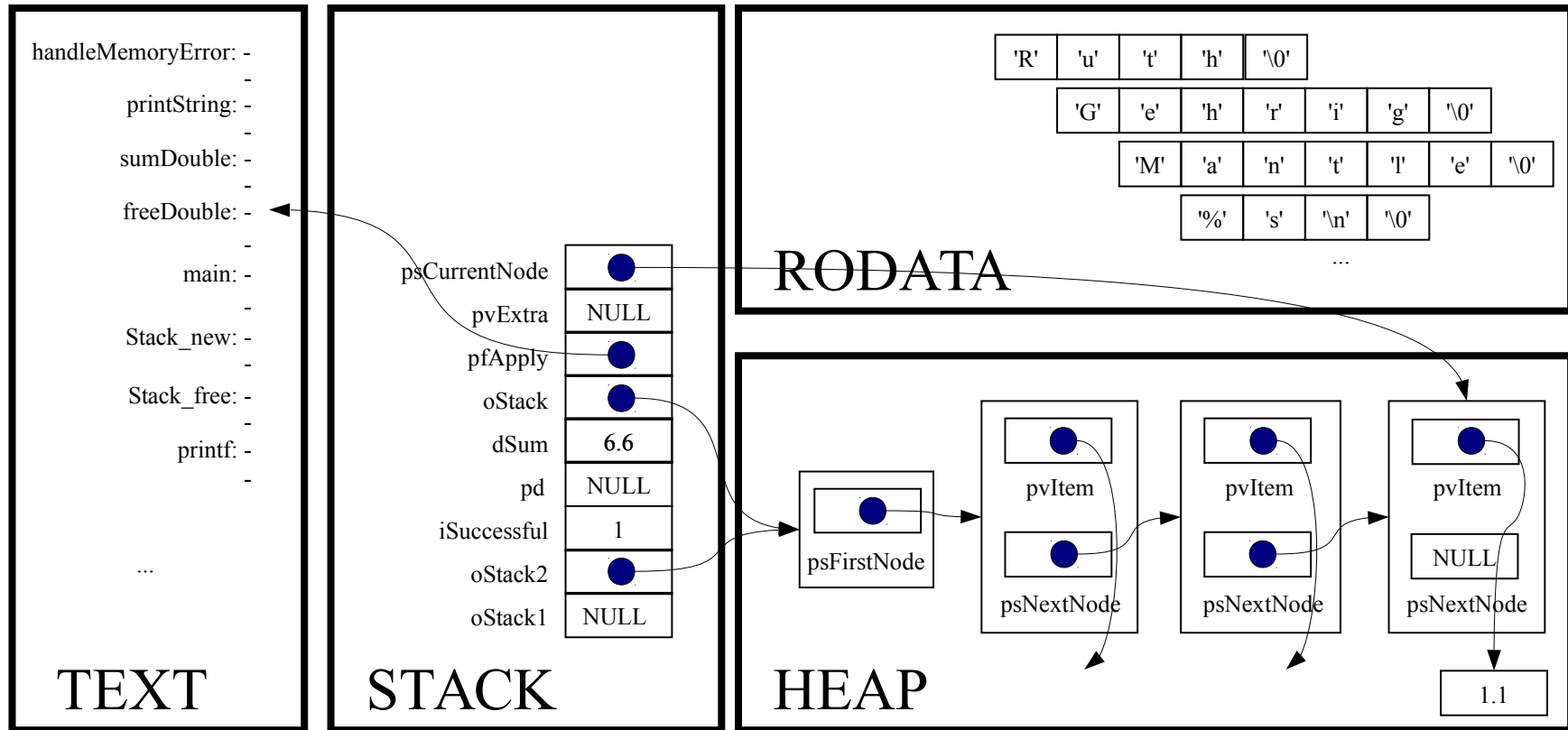
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



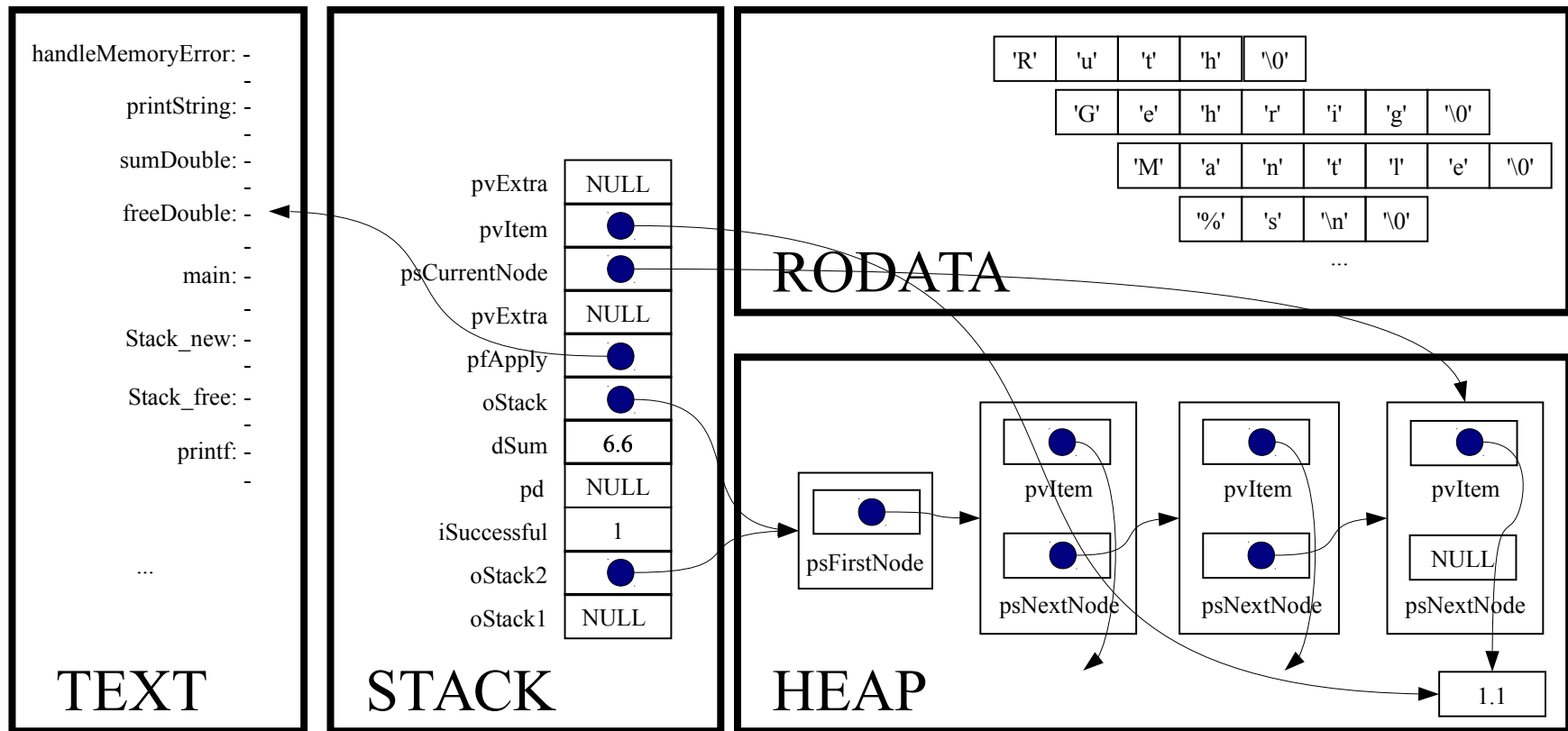
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```
(*pfApply)((void*)psCurrentNode->pvItem, (void*)pvExtra);
```



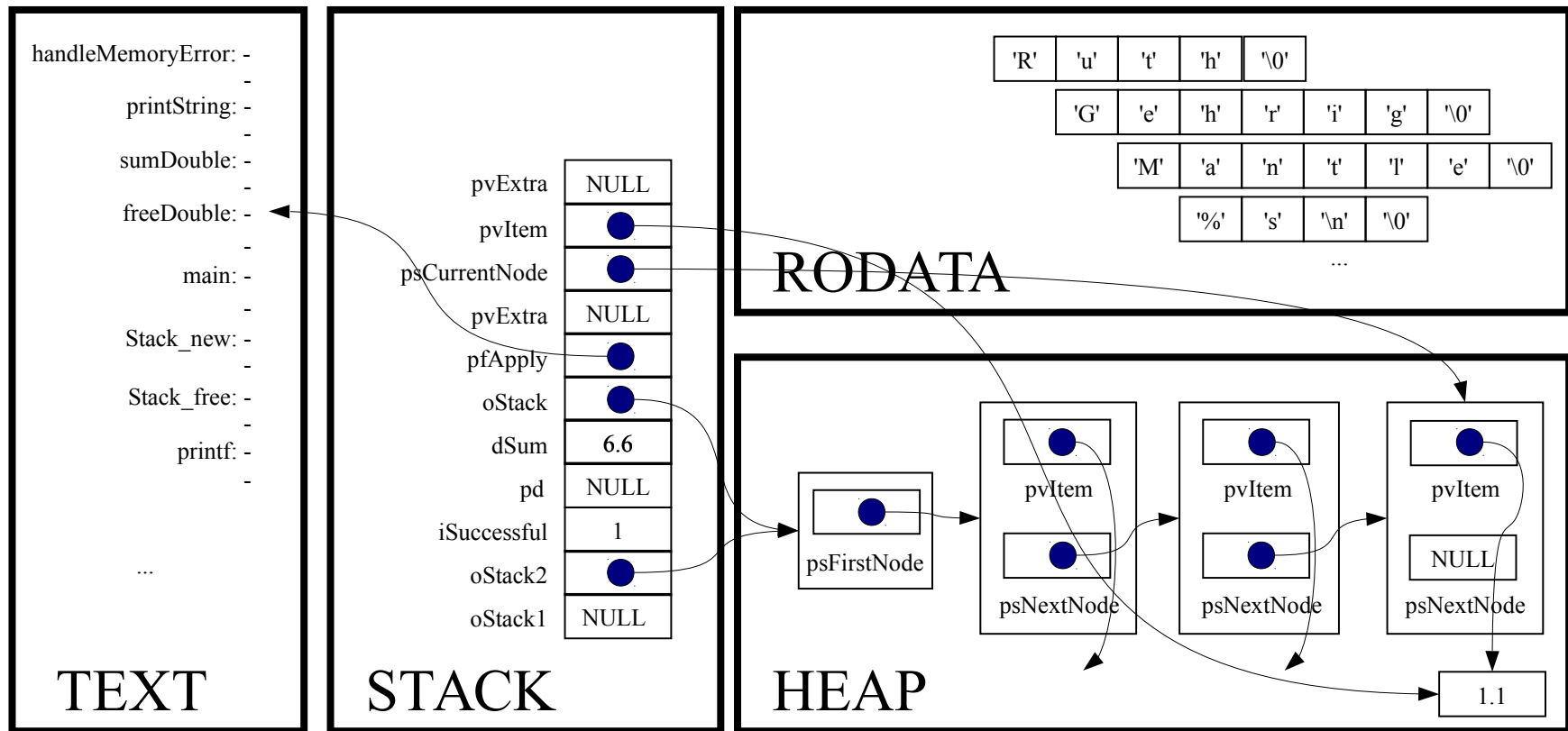
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```
static void freeDouble(void *pvItem, void *pvExtra)
```



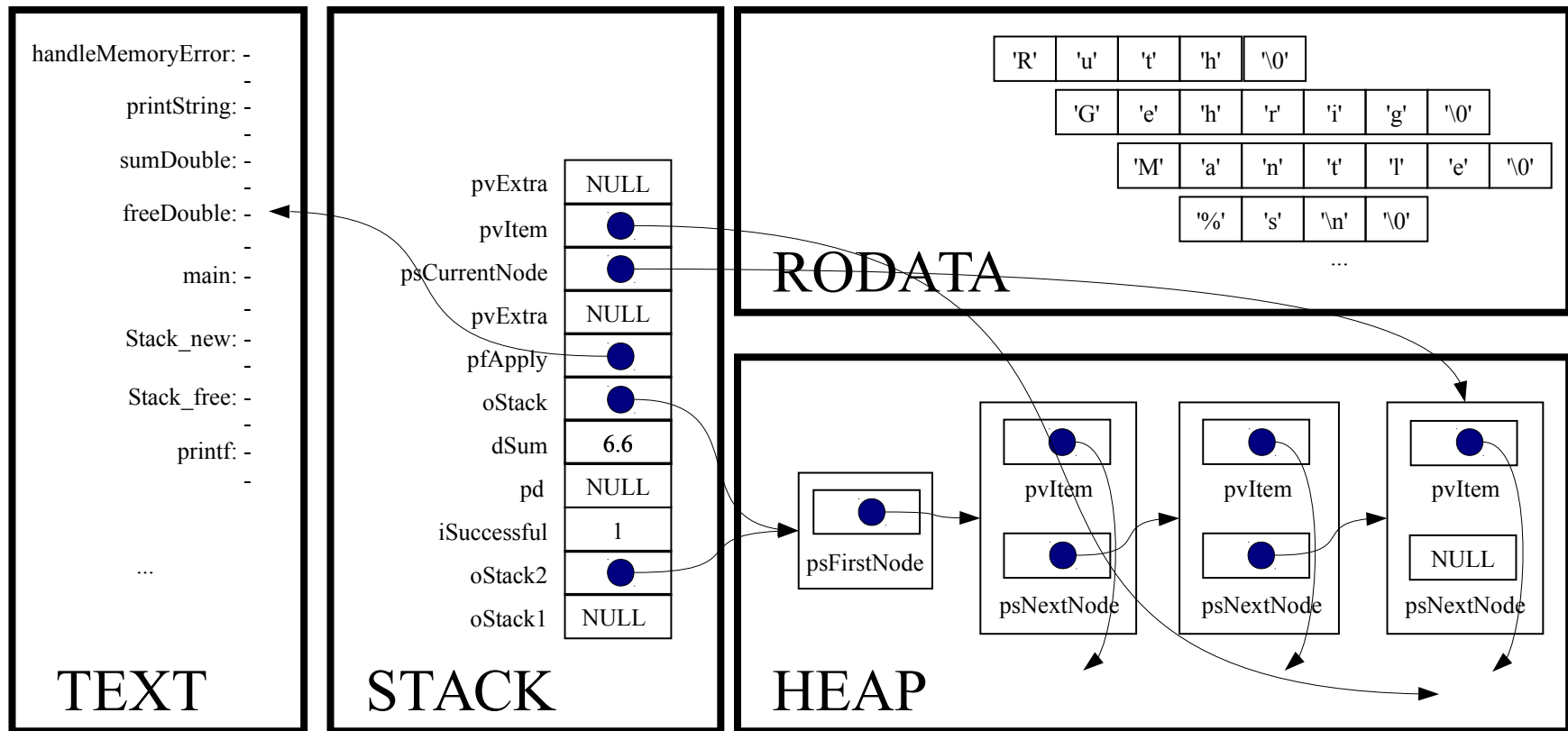
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```
assert(pvItem != NULL);
```



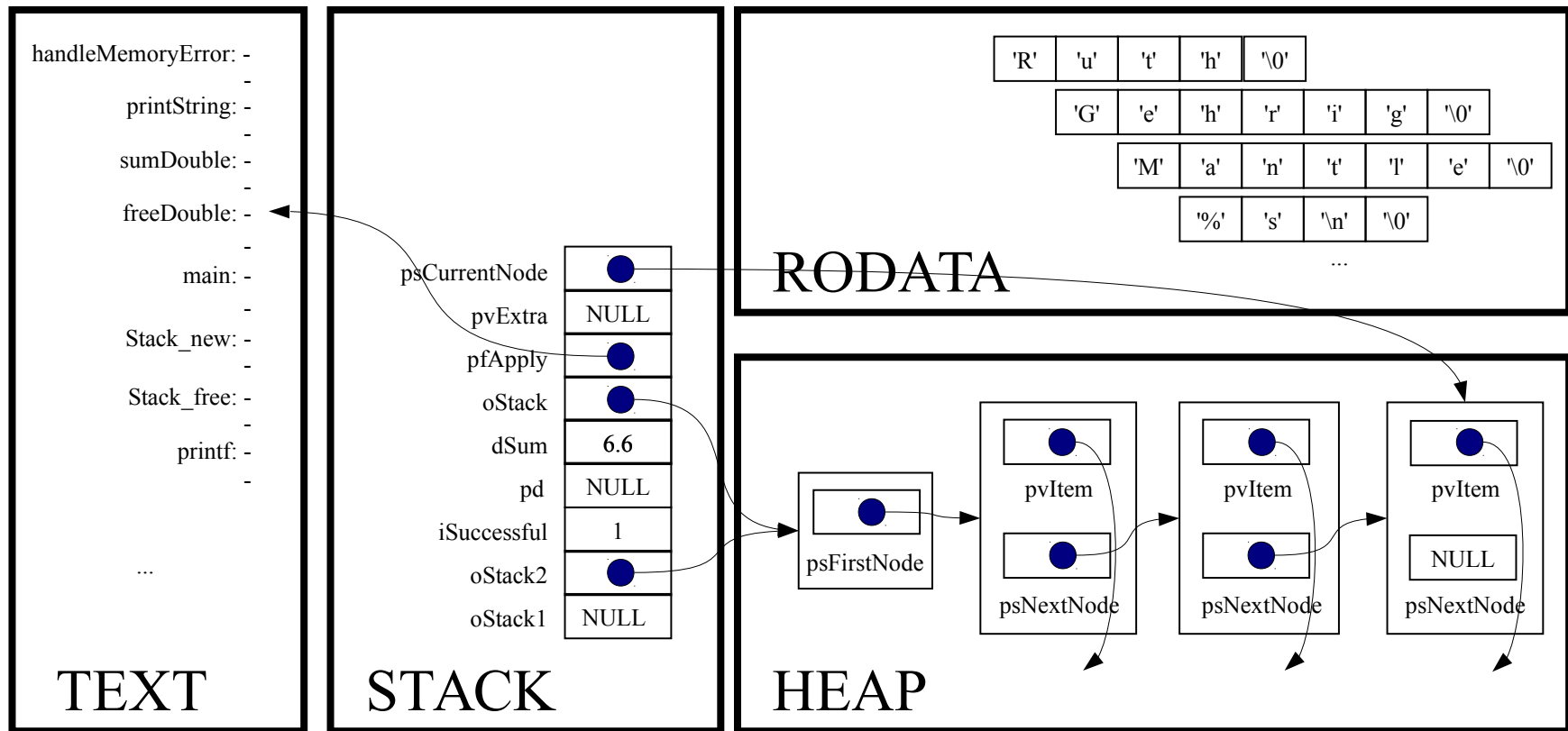
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```
free(pvItem);
```



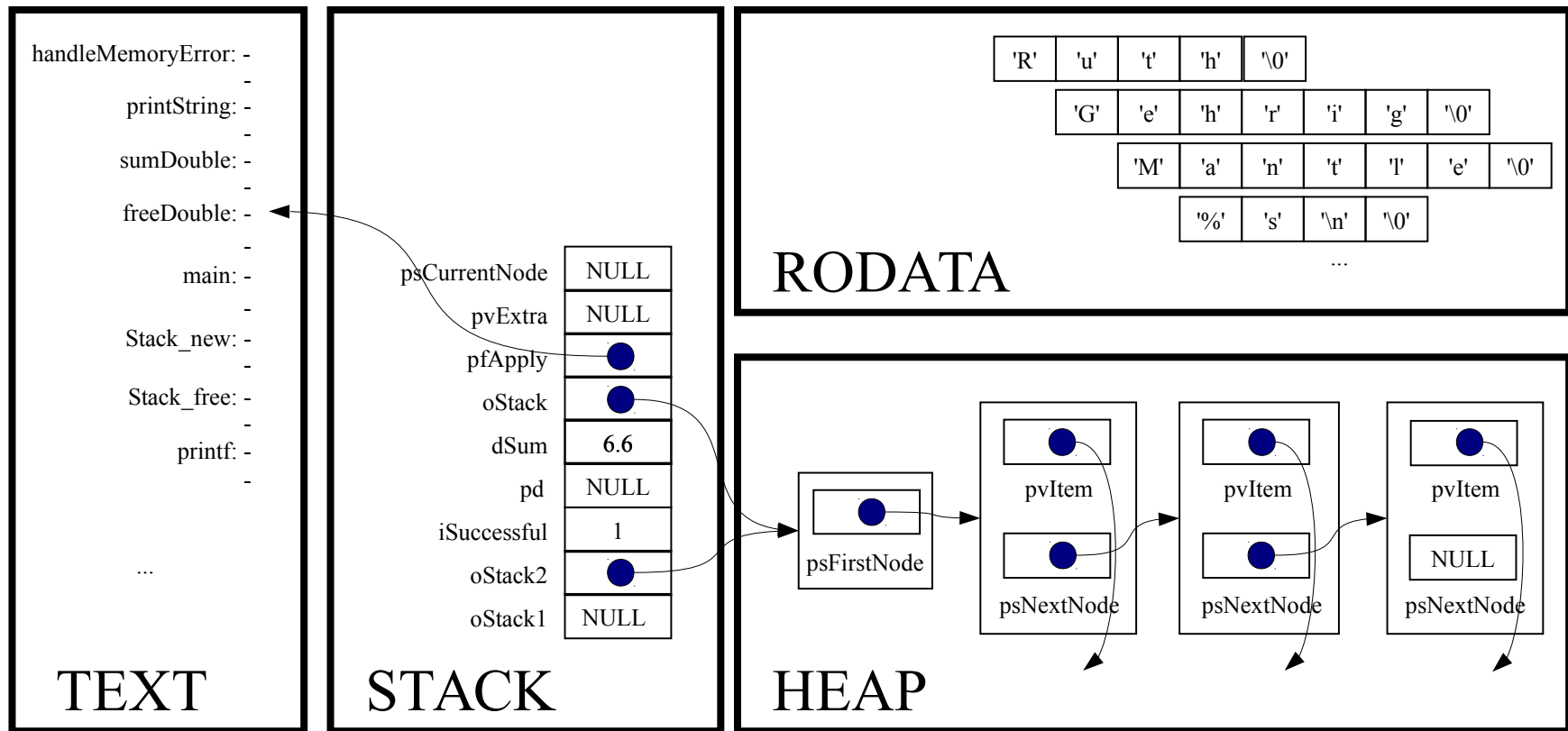
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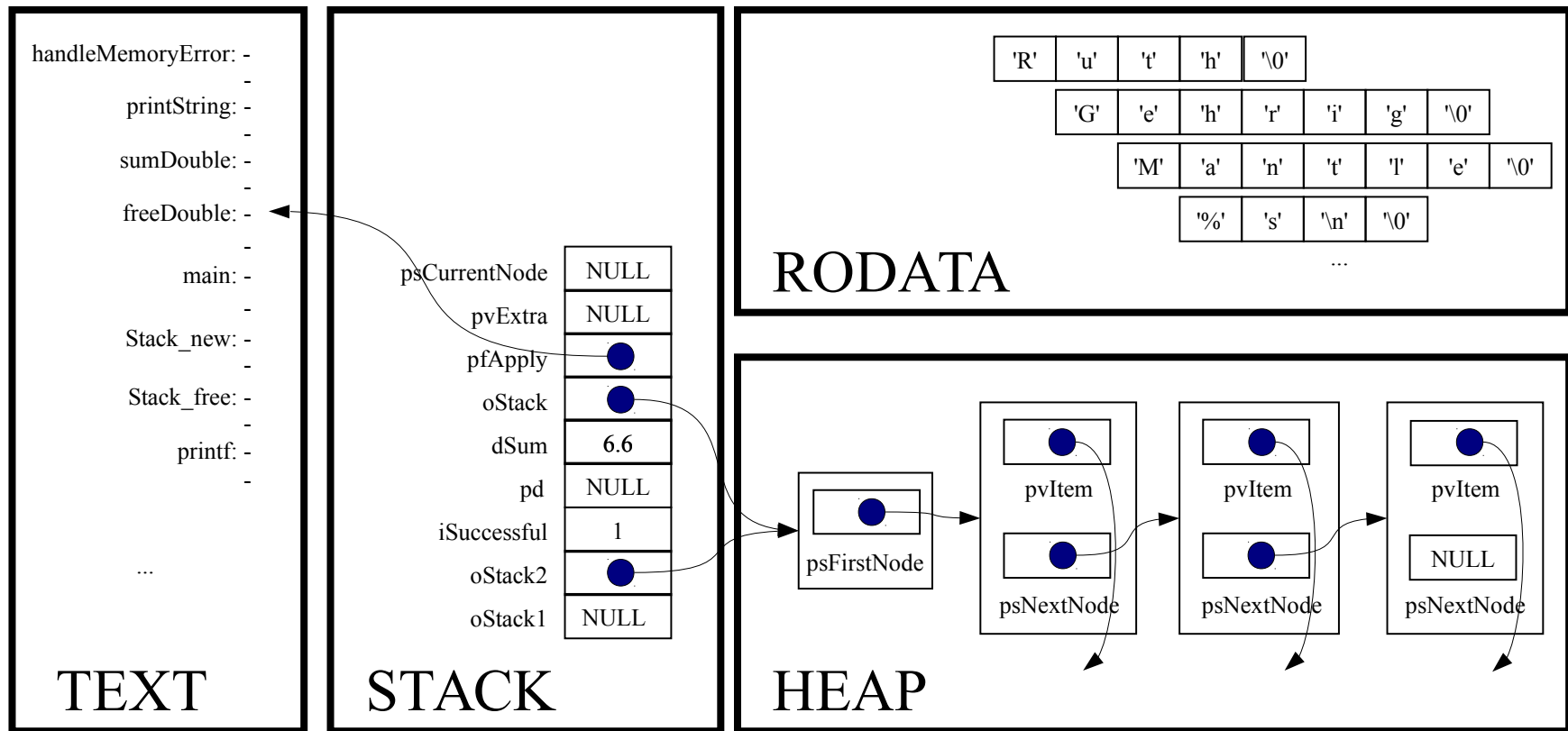
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



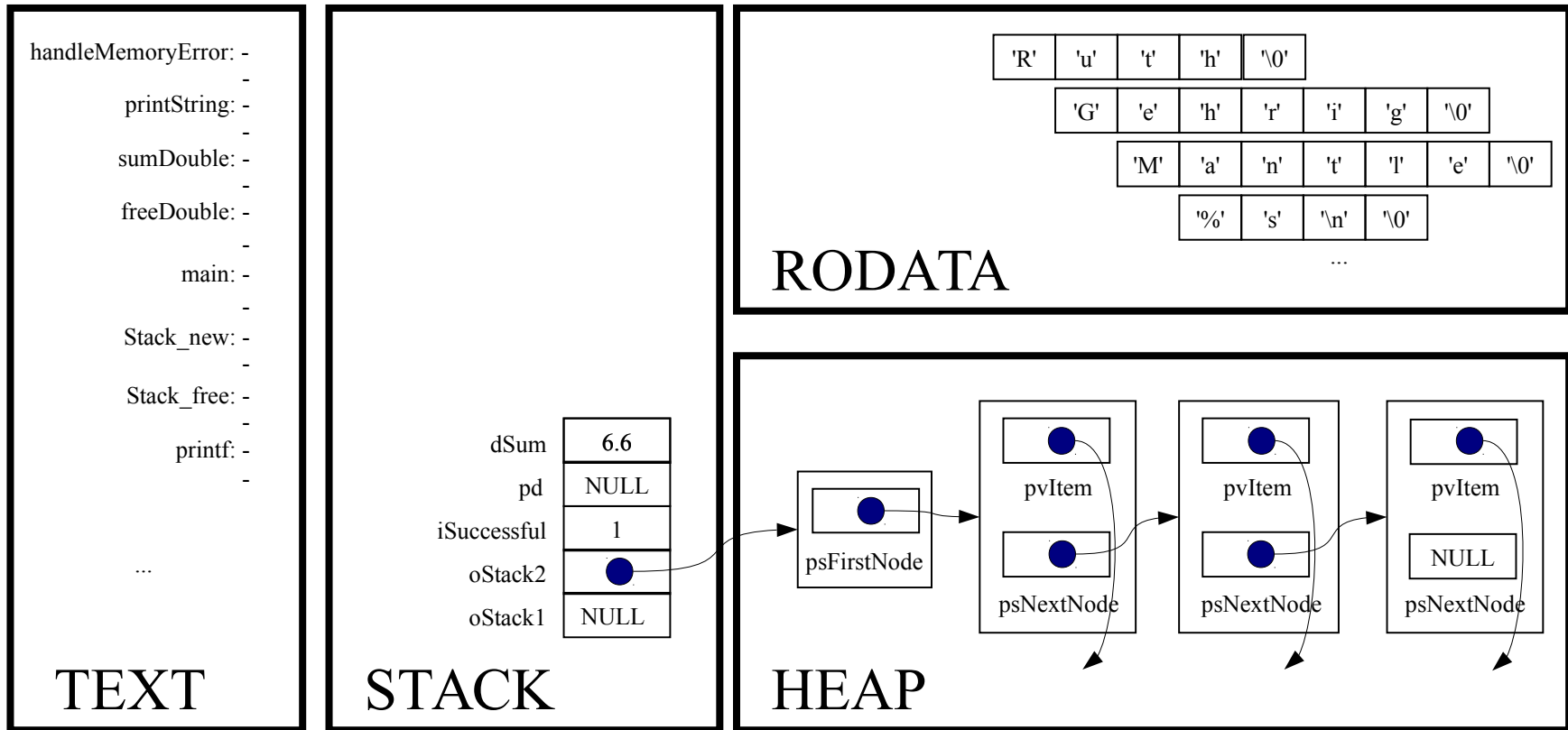
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psCurrentNode->psNextNode)
```



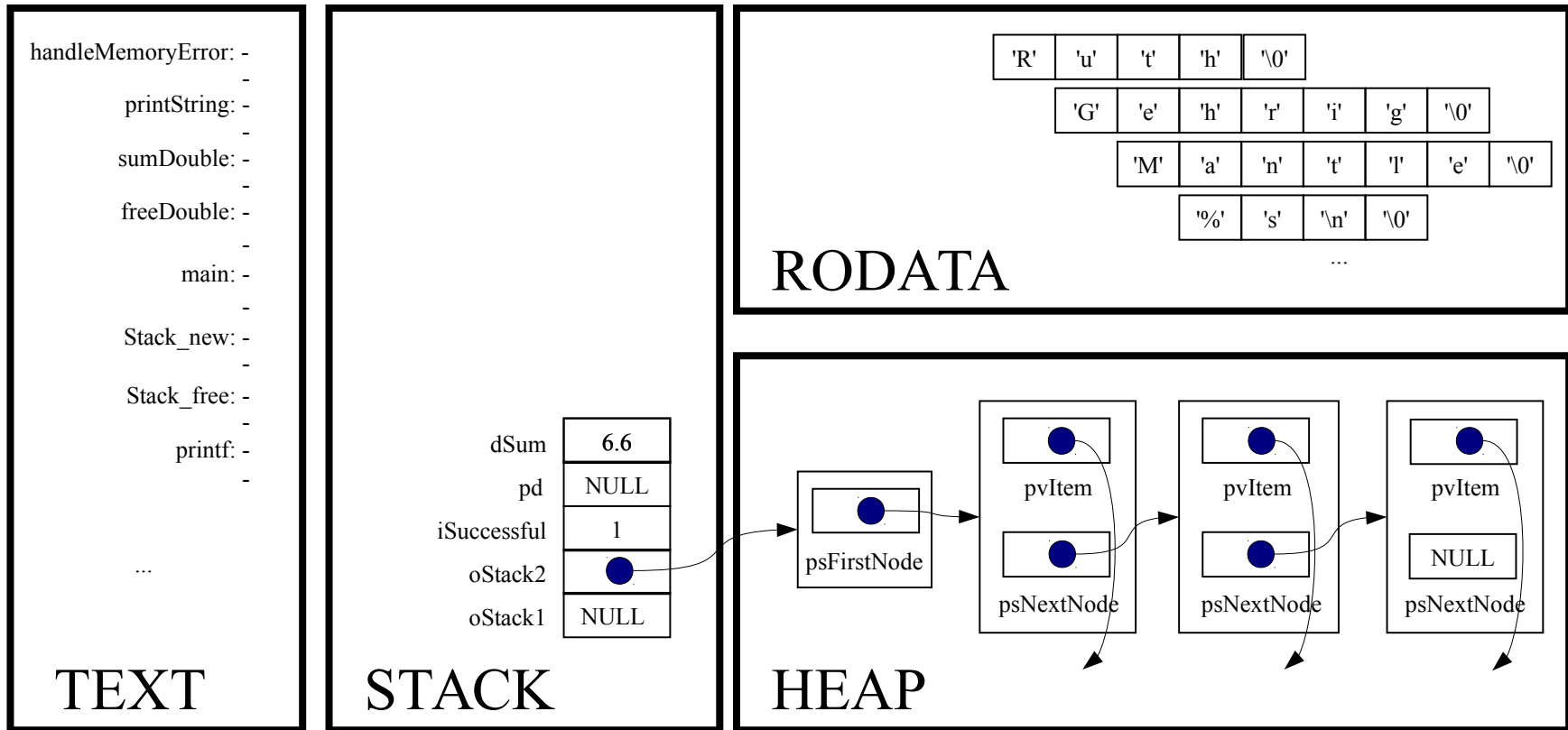
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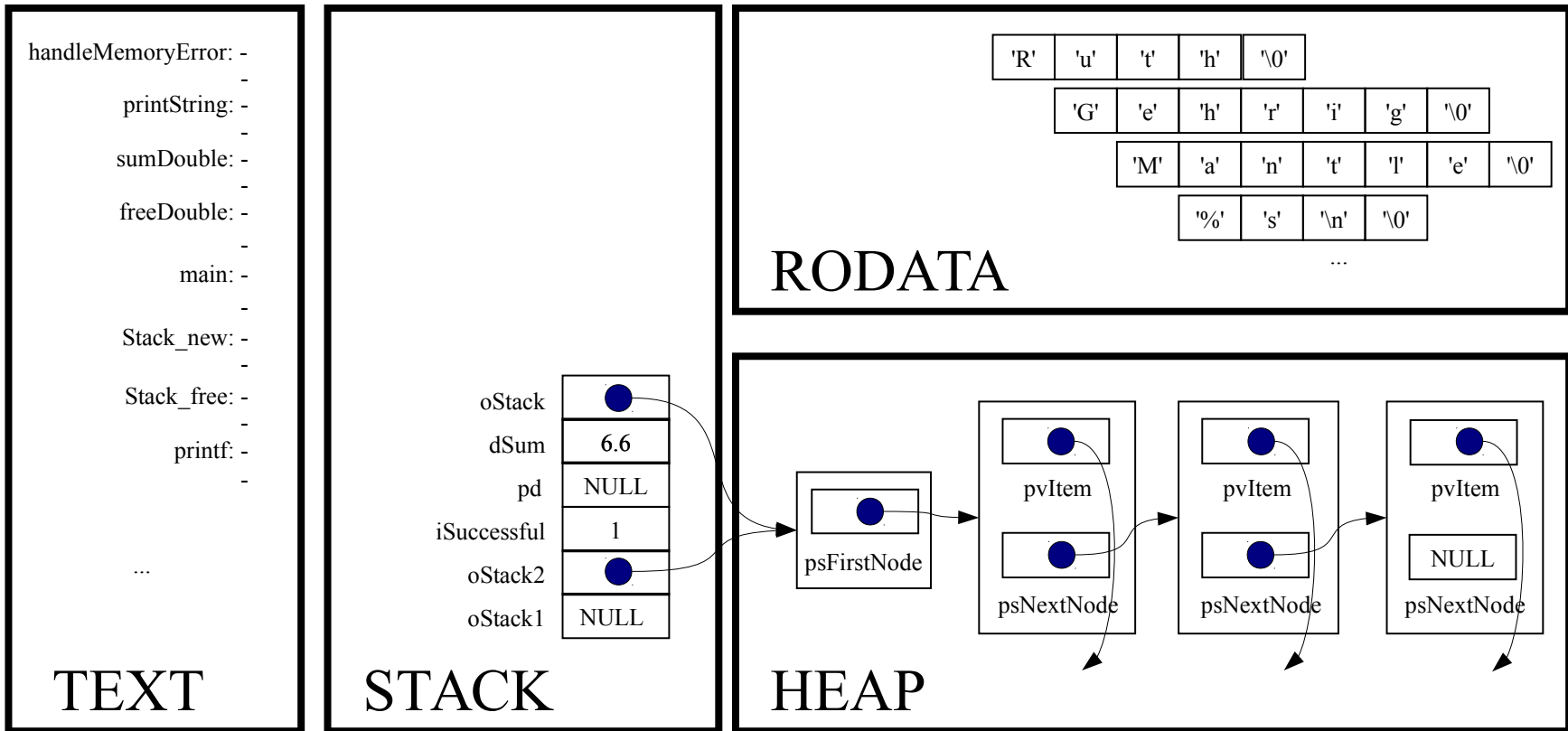
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```
Stack_free(oStack2);
```



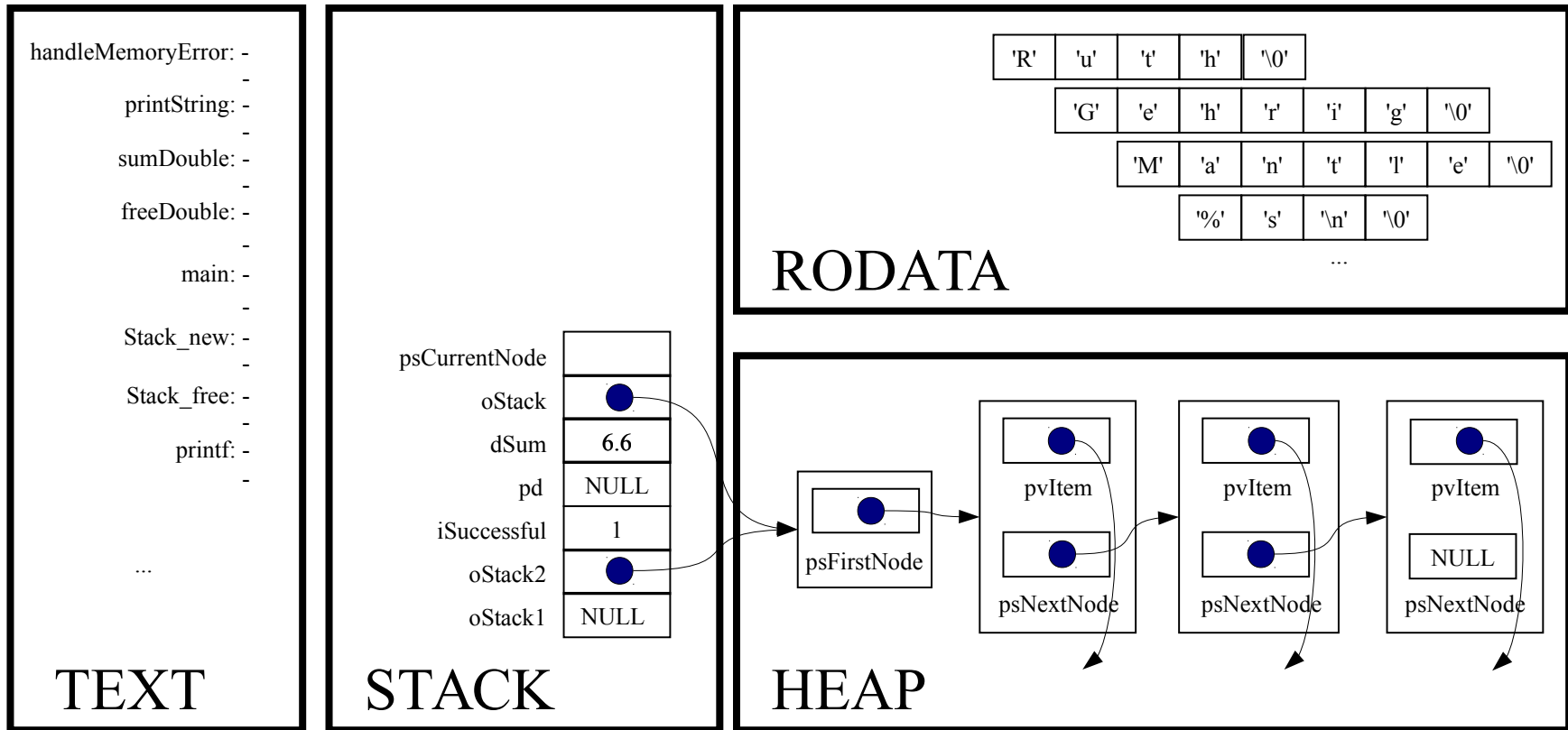
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```
void Stack_free(Stack_T oStack)
```



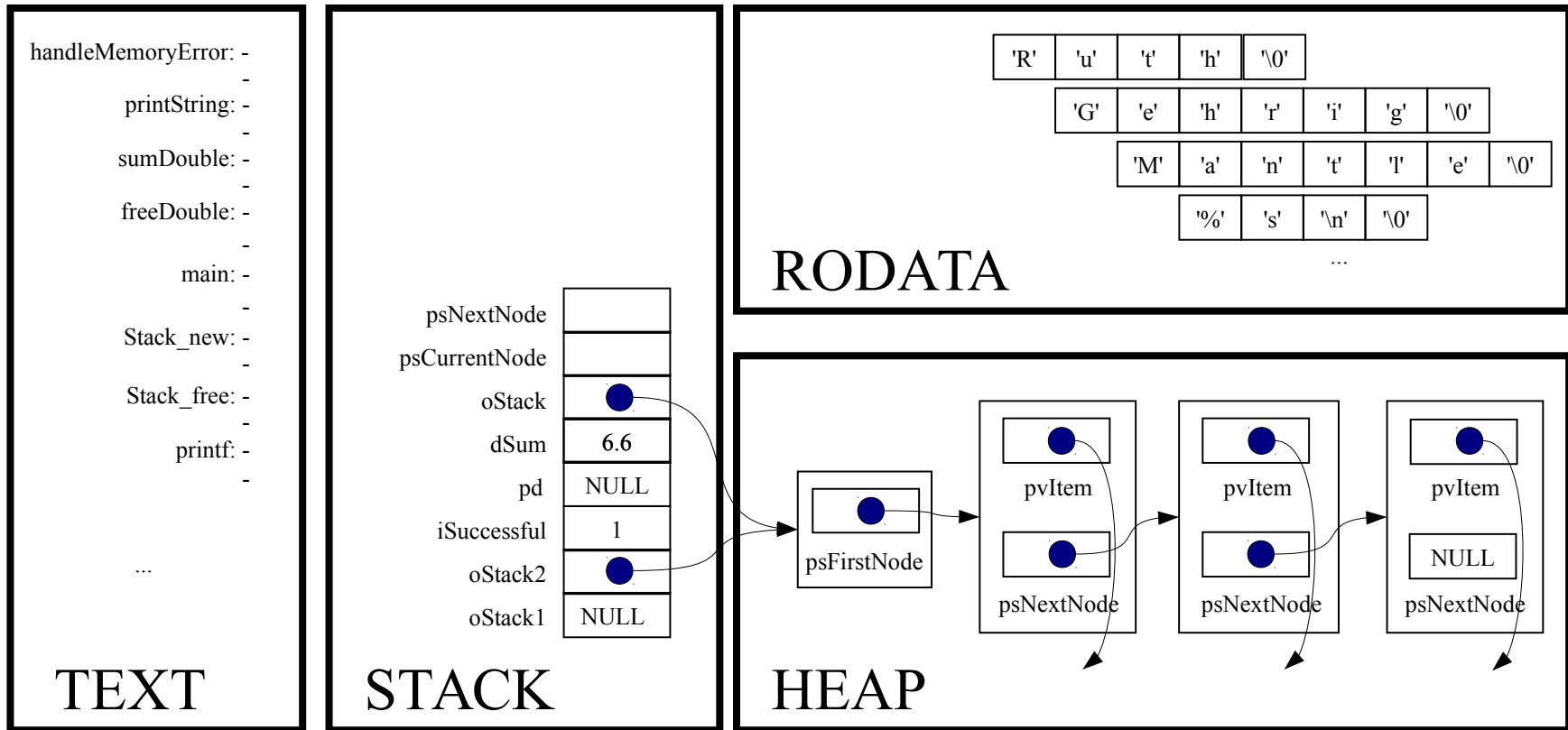
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```
struct StackNode *psCurrentNode;
```



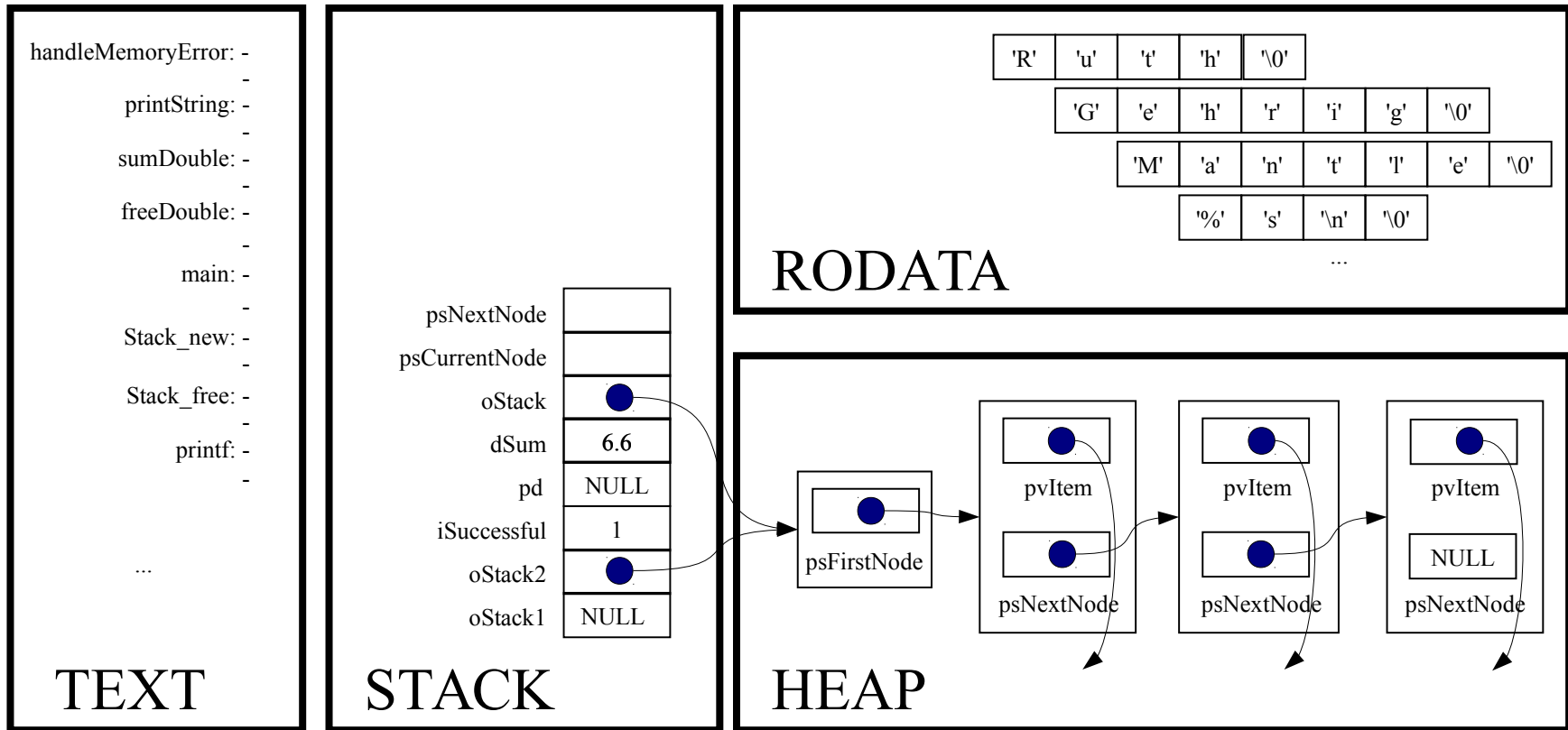
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```
struct StackNode *psNextNode;
```



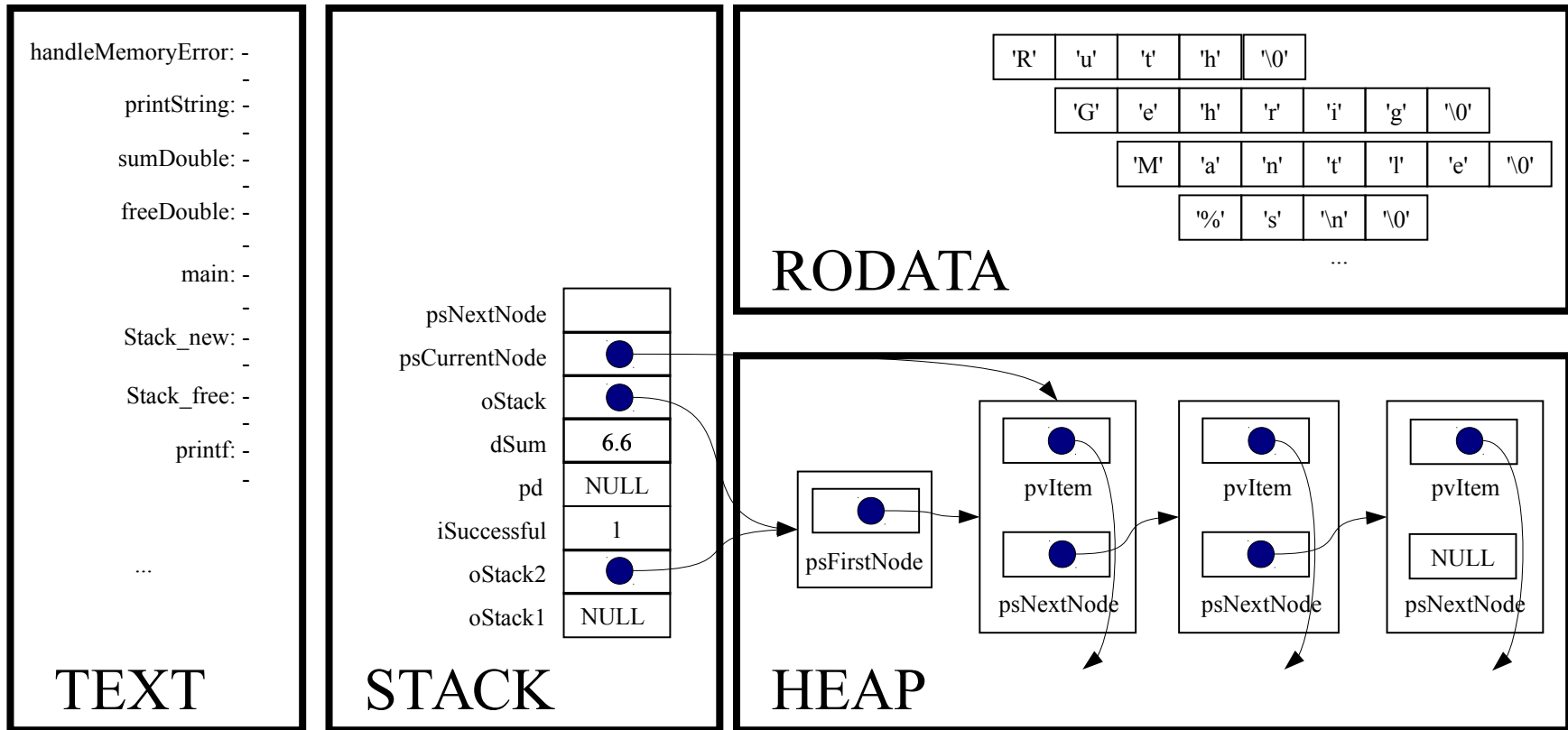
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```
assert(oStack != NULL);
```



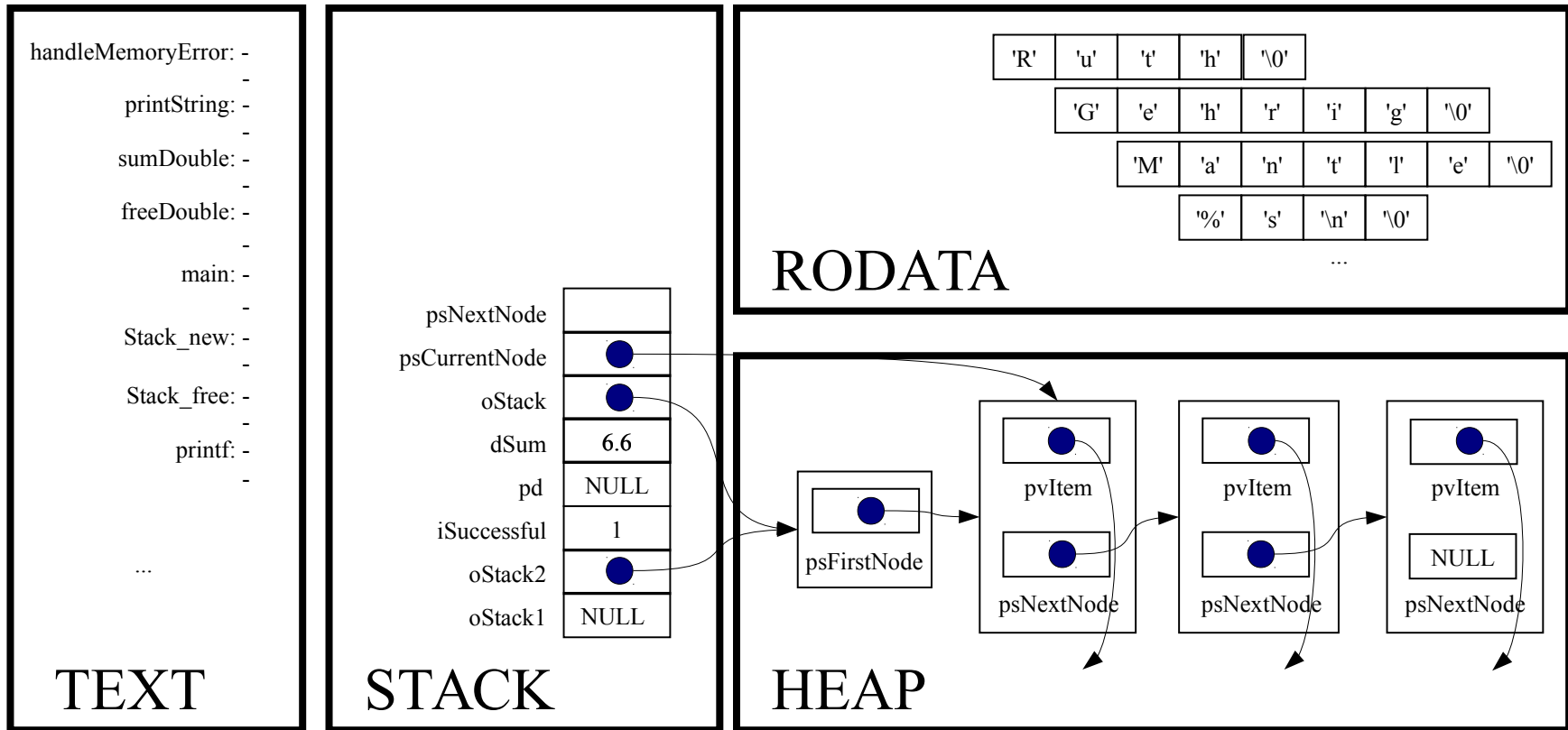
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psNextNode)
```



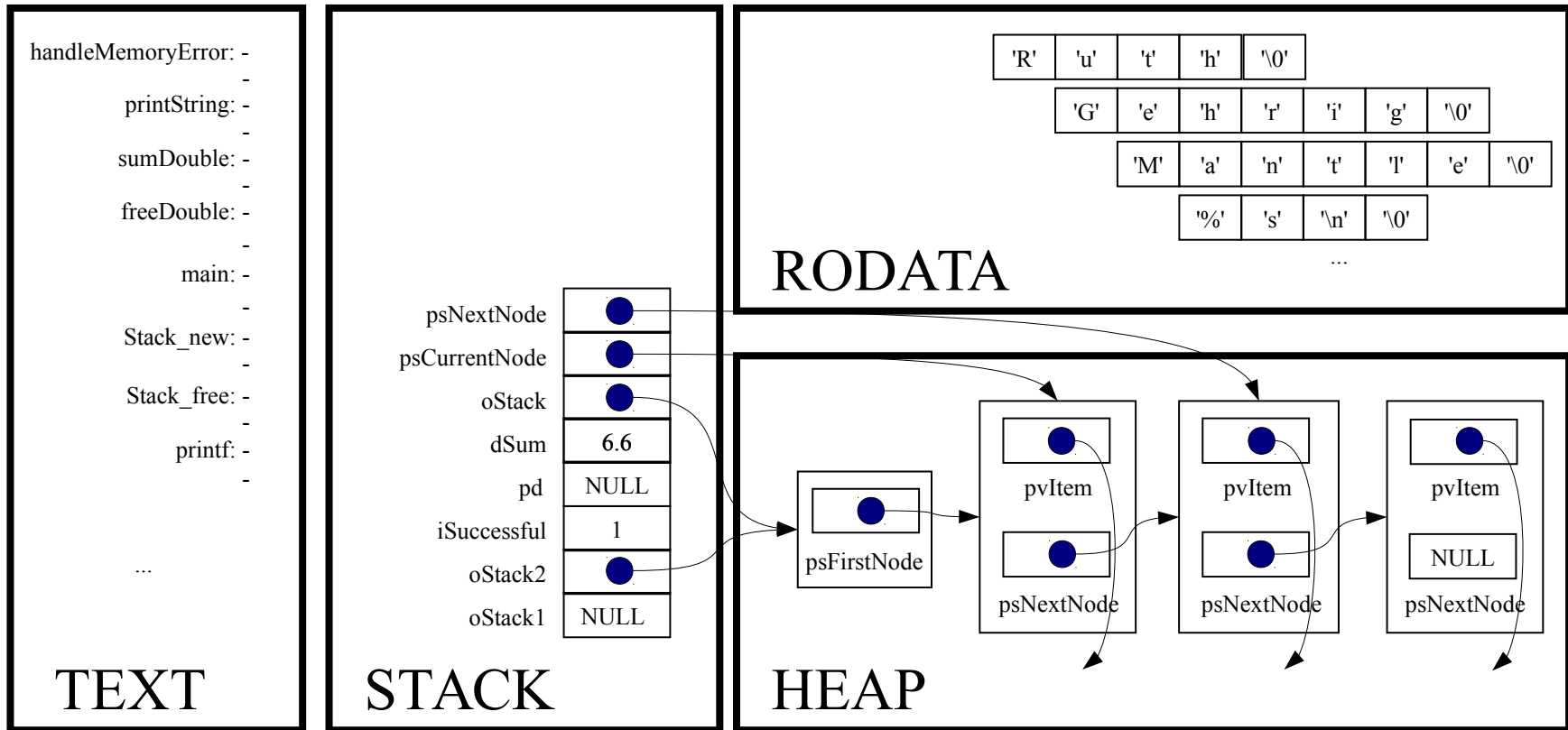
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psNextNode)
```



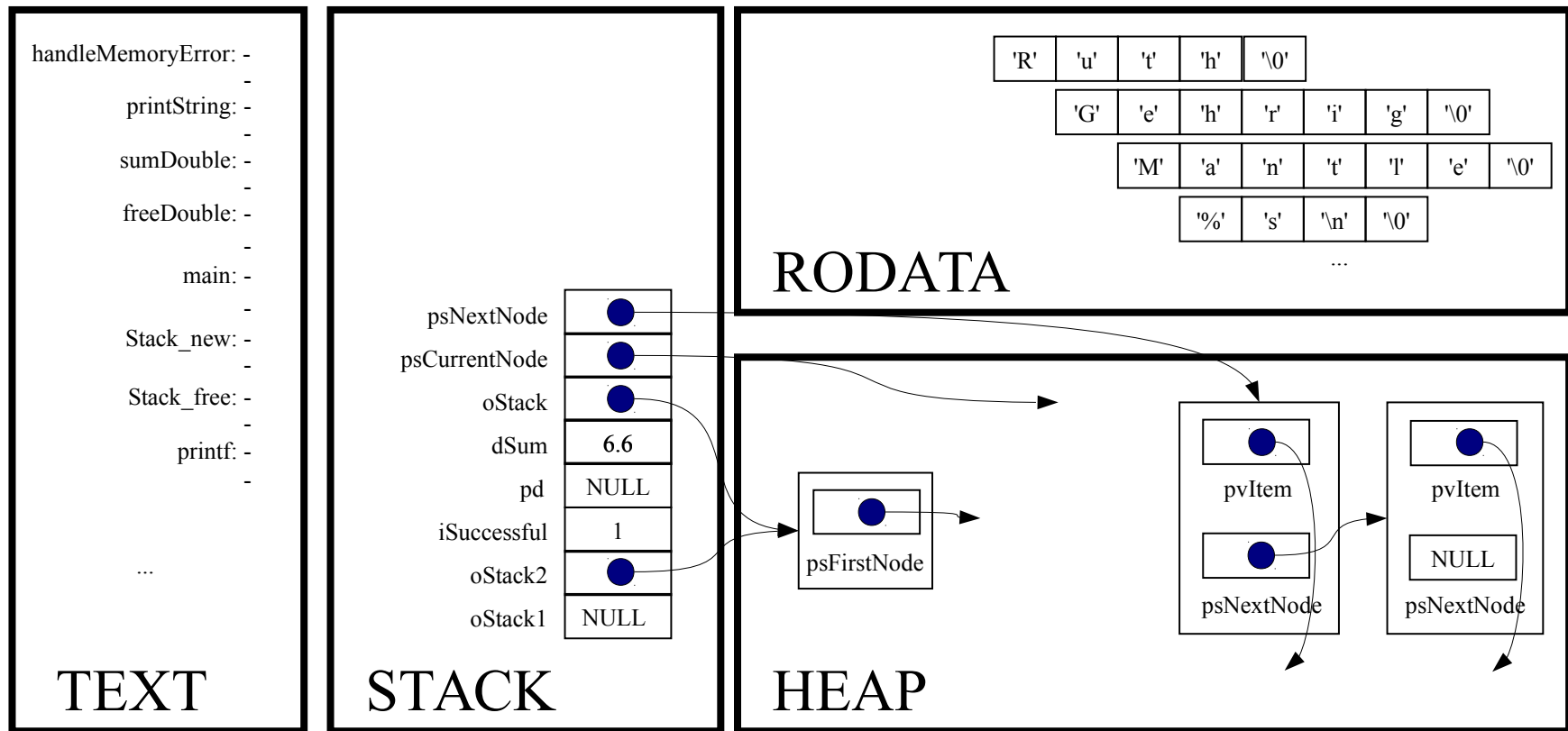
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```
psNextNode = psCurrentNode->psNextNode;
```



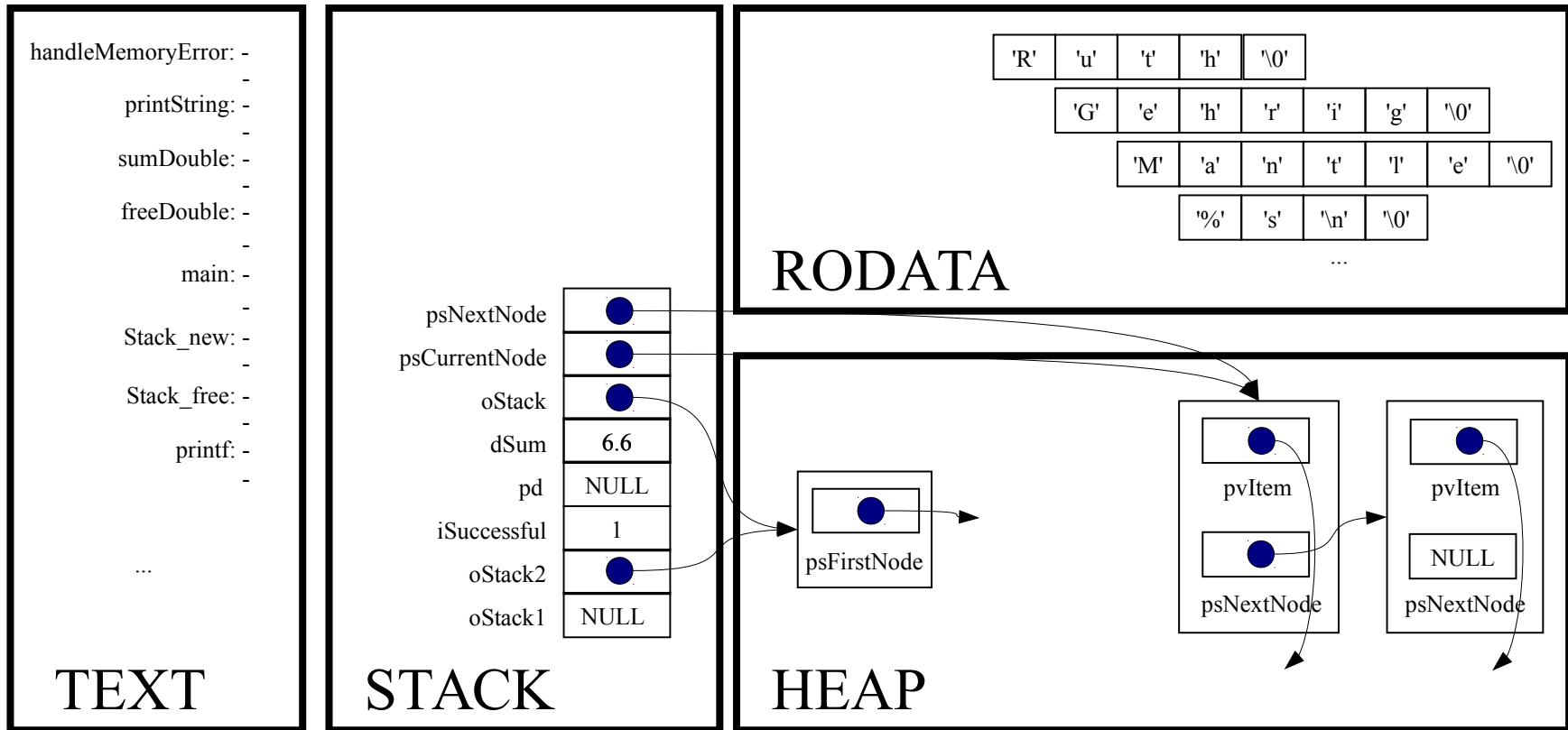
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```
free(psCurrentNode);
```



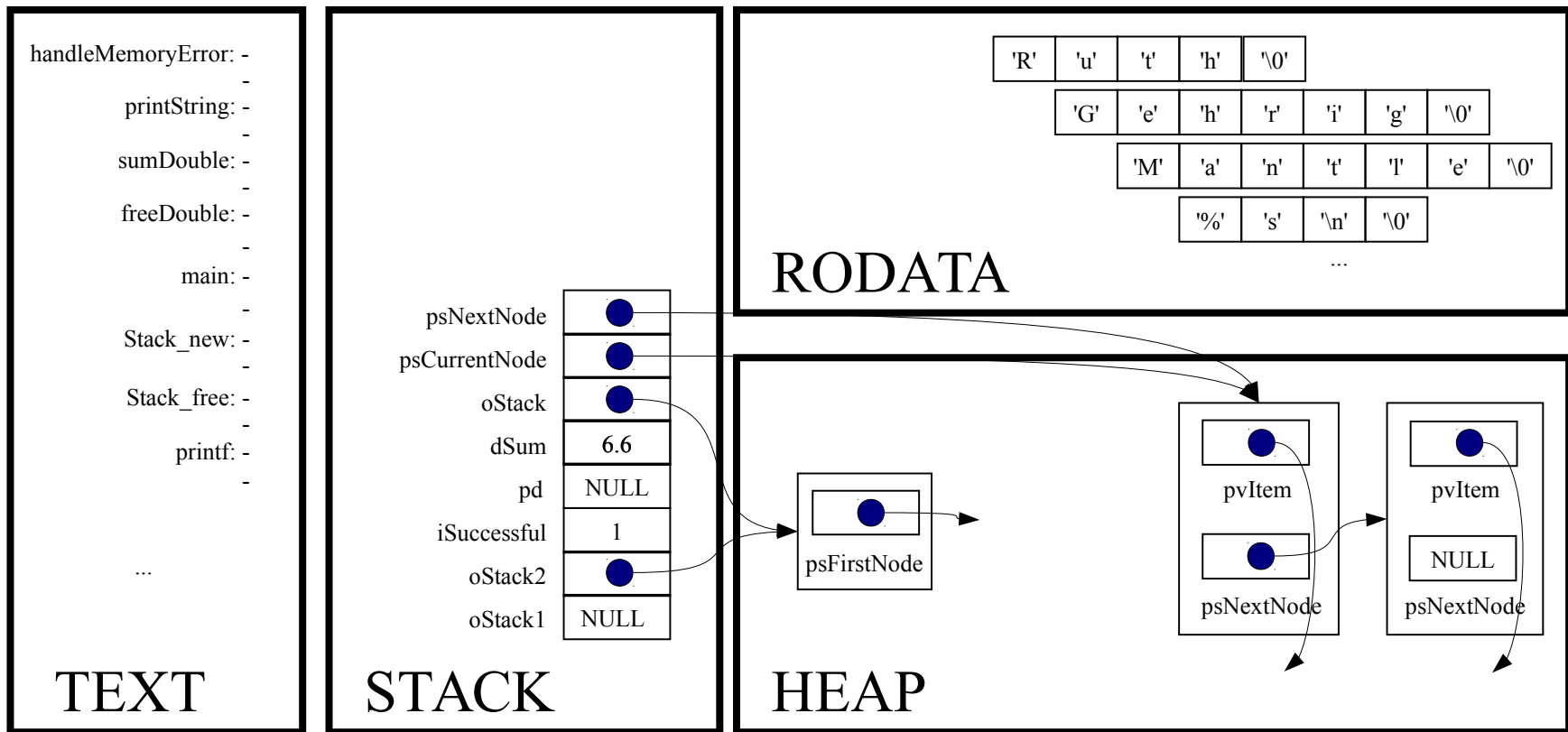
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    psCurrentNode = psNextNode)
```



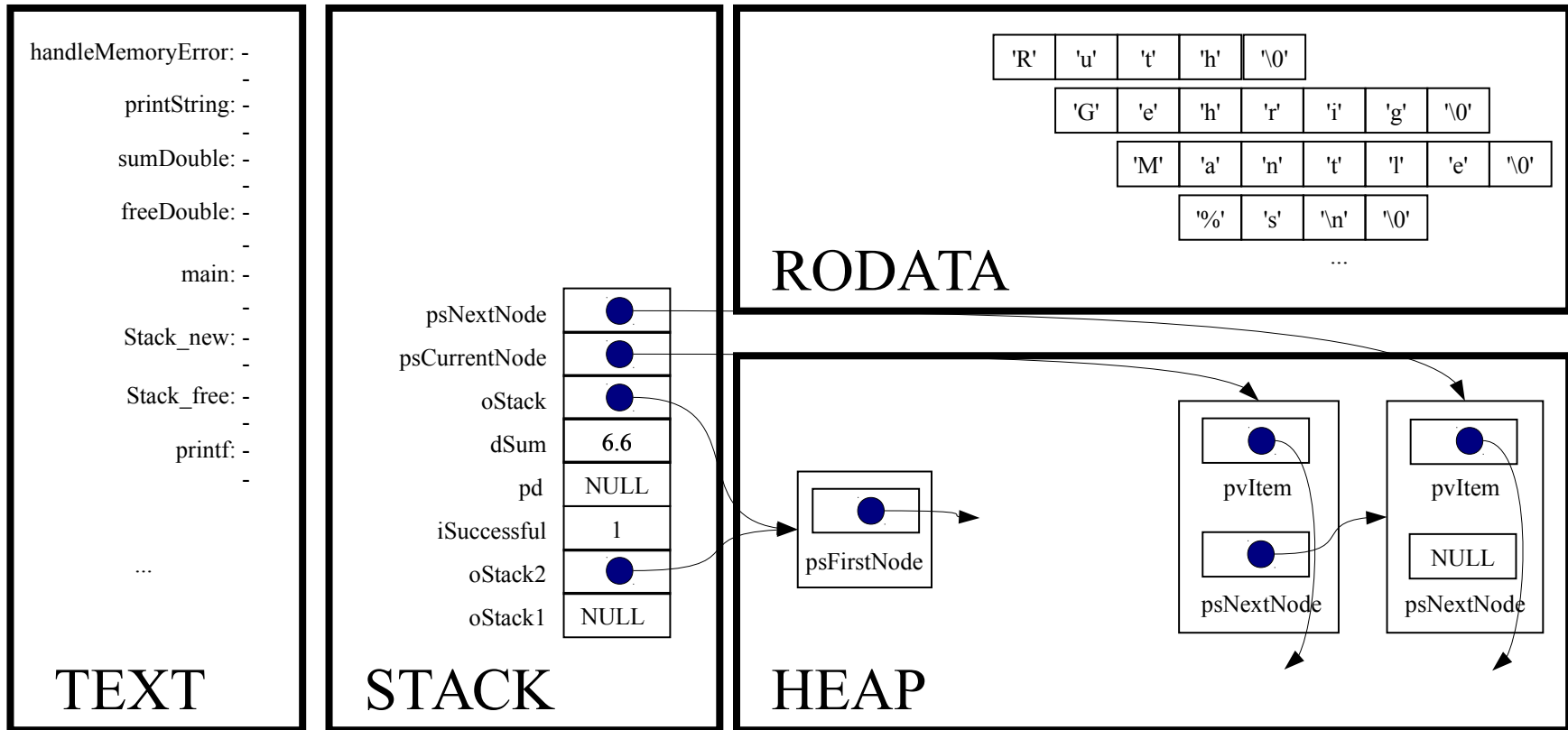
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
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```



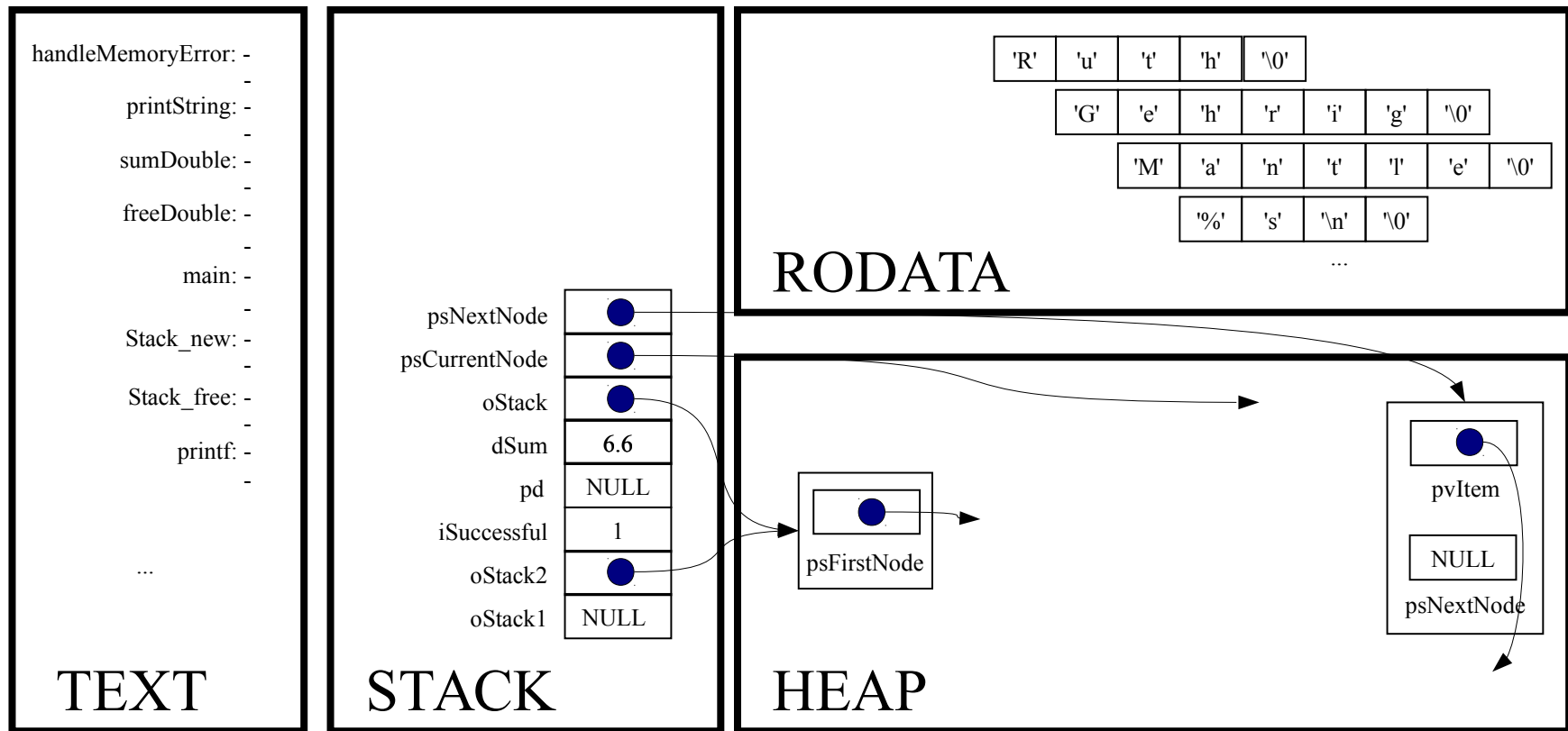
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```
psNextNode = psCurrentNode->psNextNode;
```



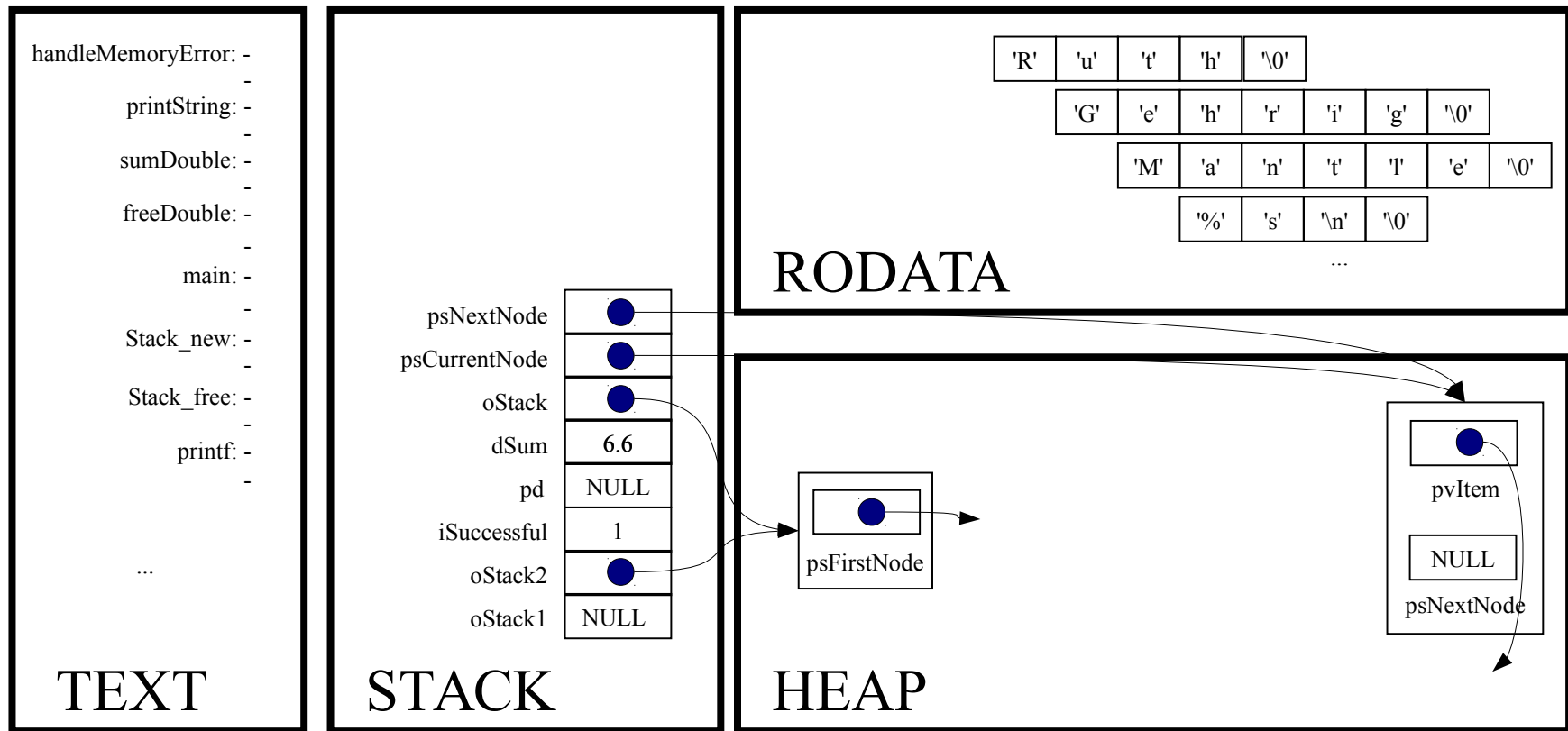
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```
free(psCurrentNode);
```



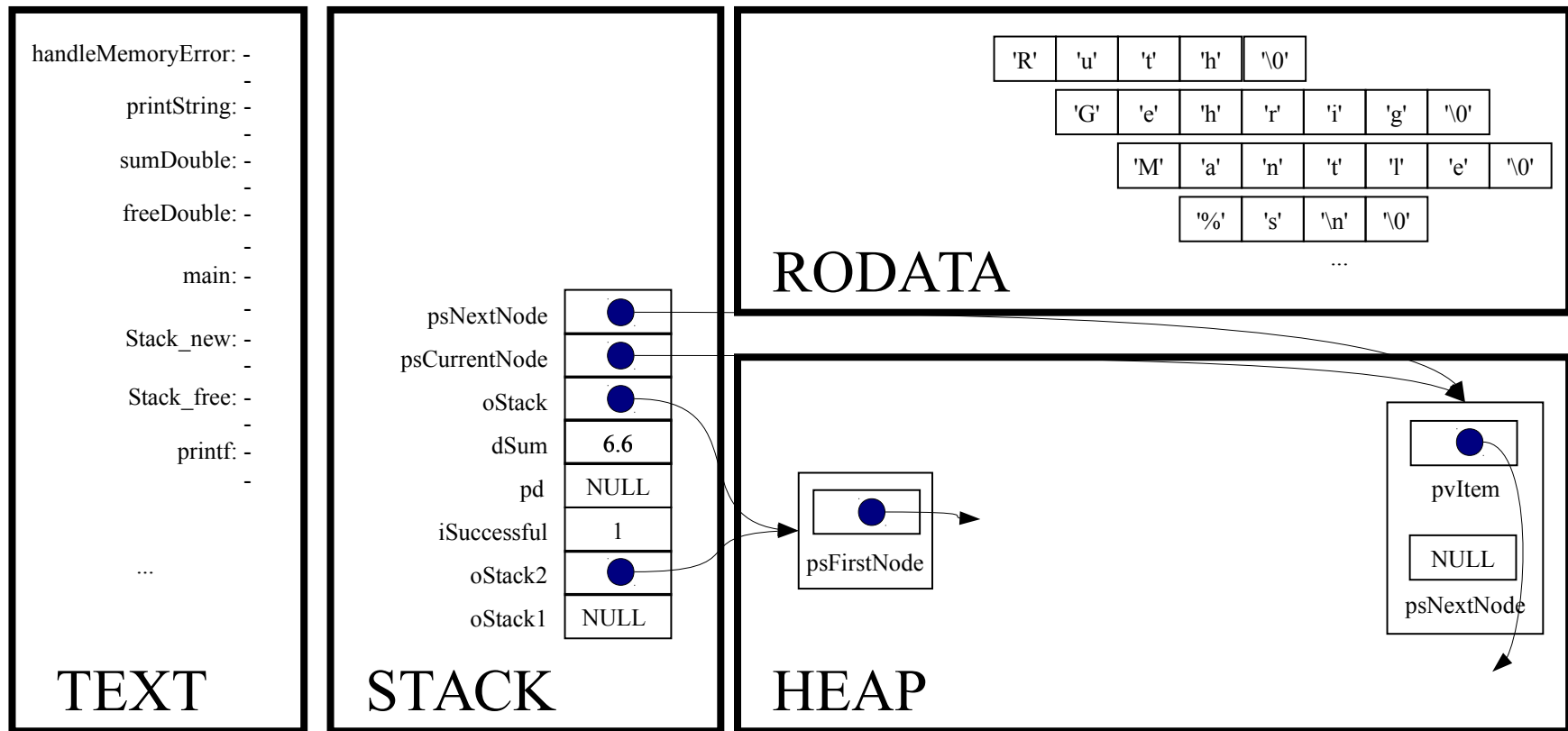
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```
for (psCurrentNode = oStack->psFirstNode;
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```



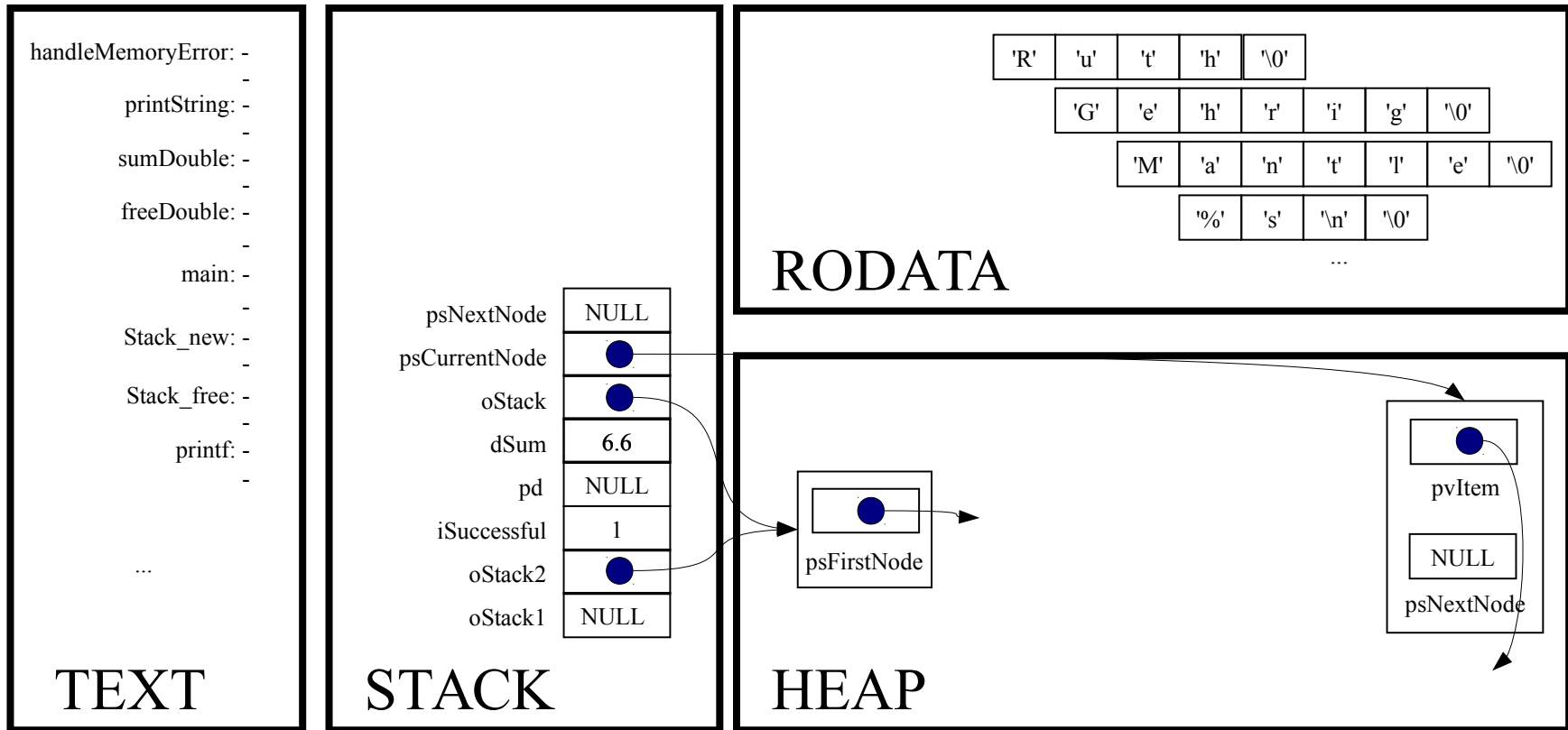
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psNextNode)
```



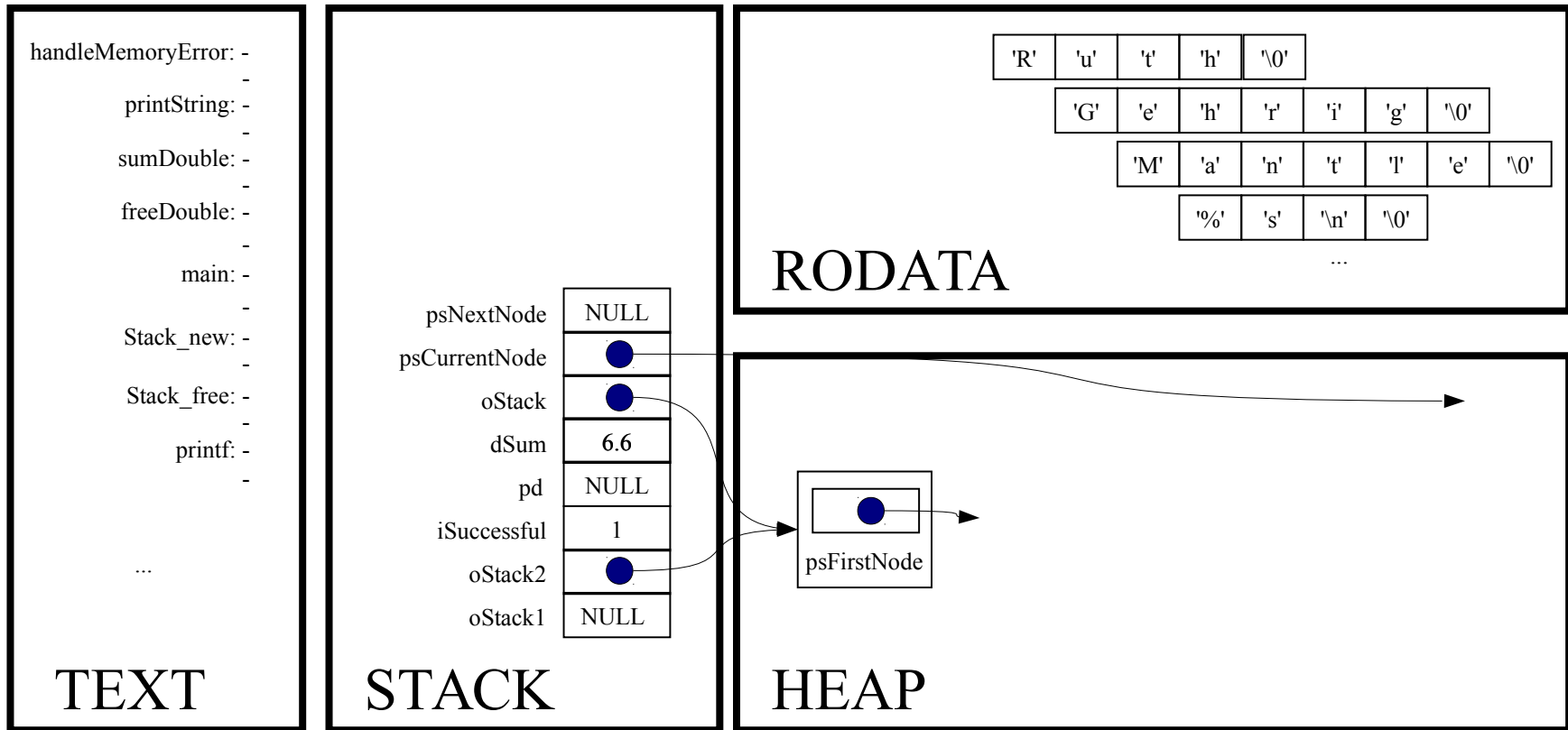
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```
psNextNode = psCurrentNode->psNextNode;
```



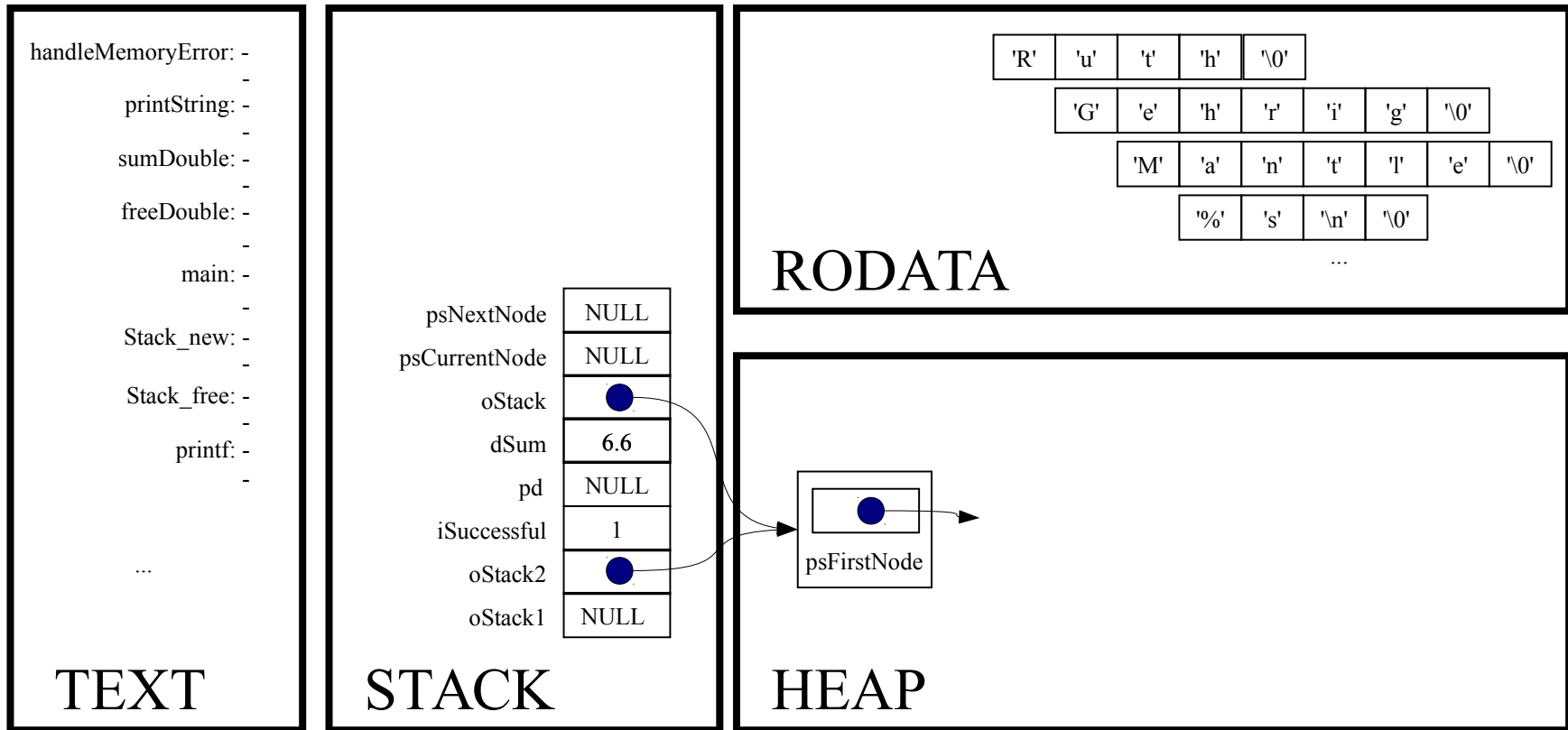
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```
free(psCurrentNode);
```



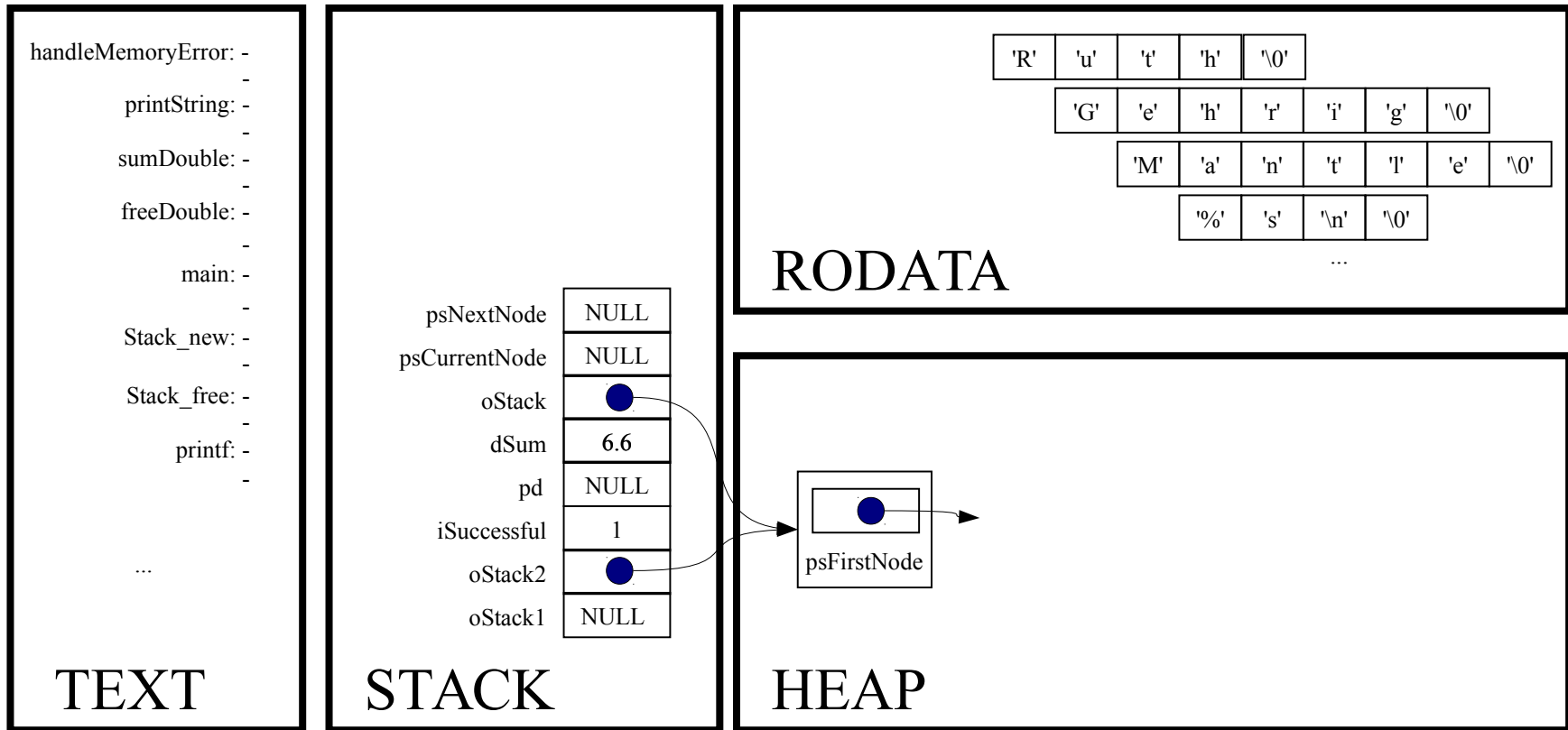
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```
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```



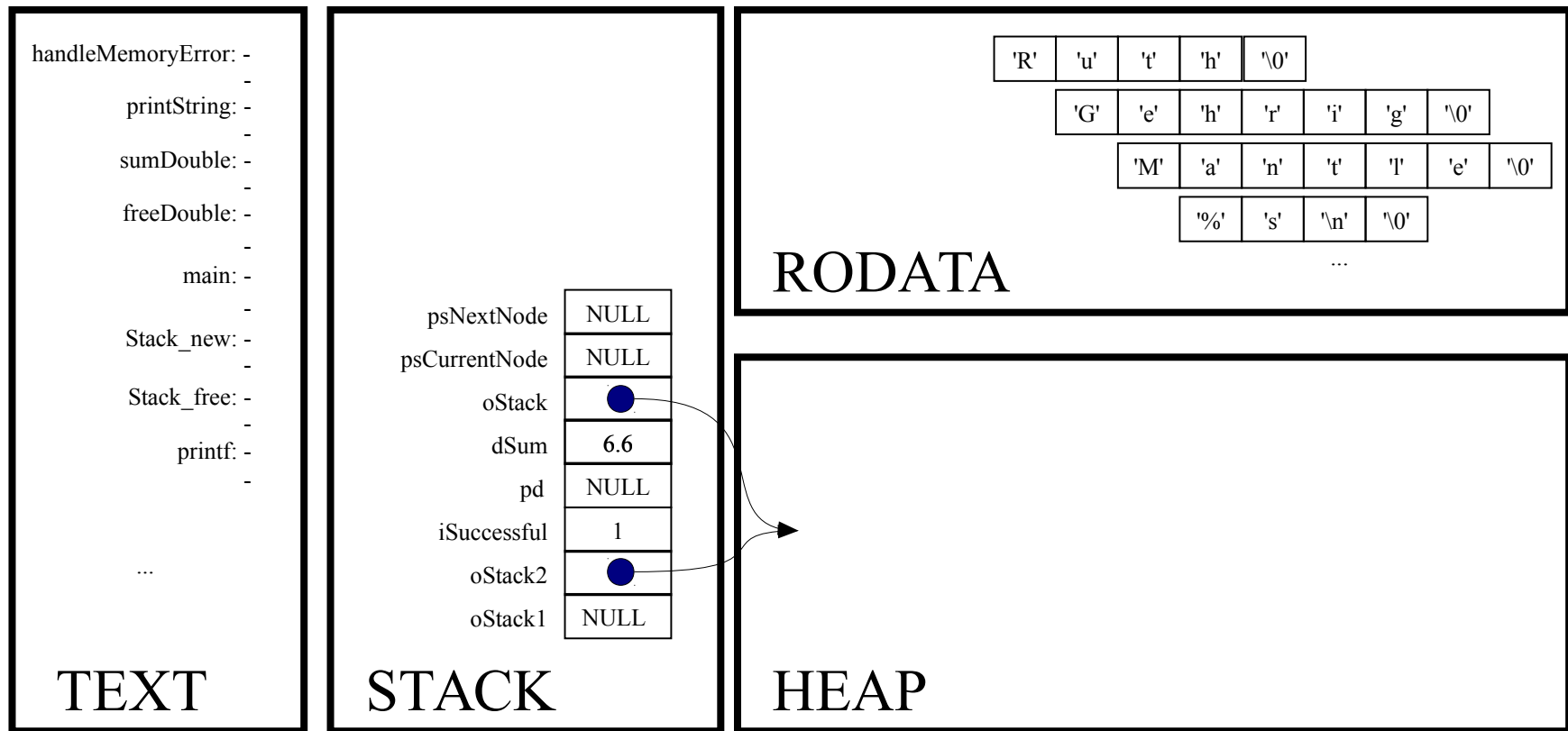
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```
for (psCurrentNode = oStack->psFirstNode;
    psCurrentNode != NULL;
    psCurrentNode = psNextNode)
```



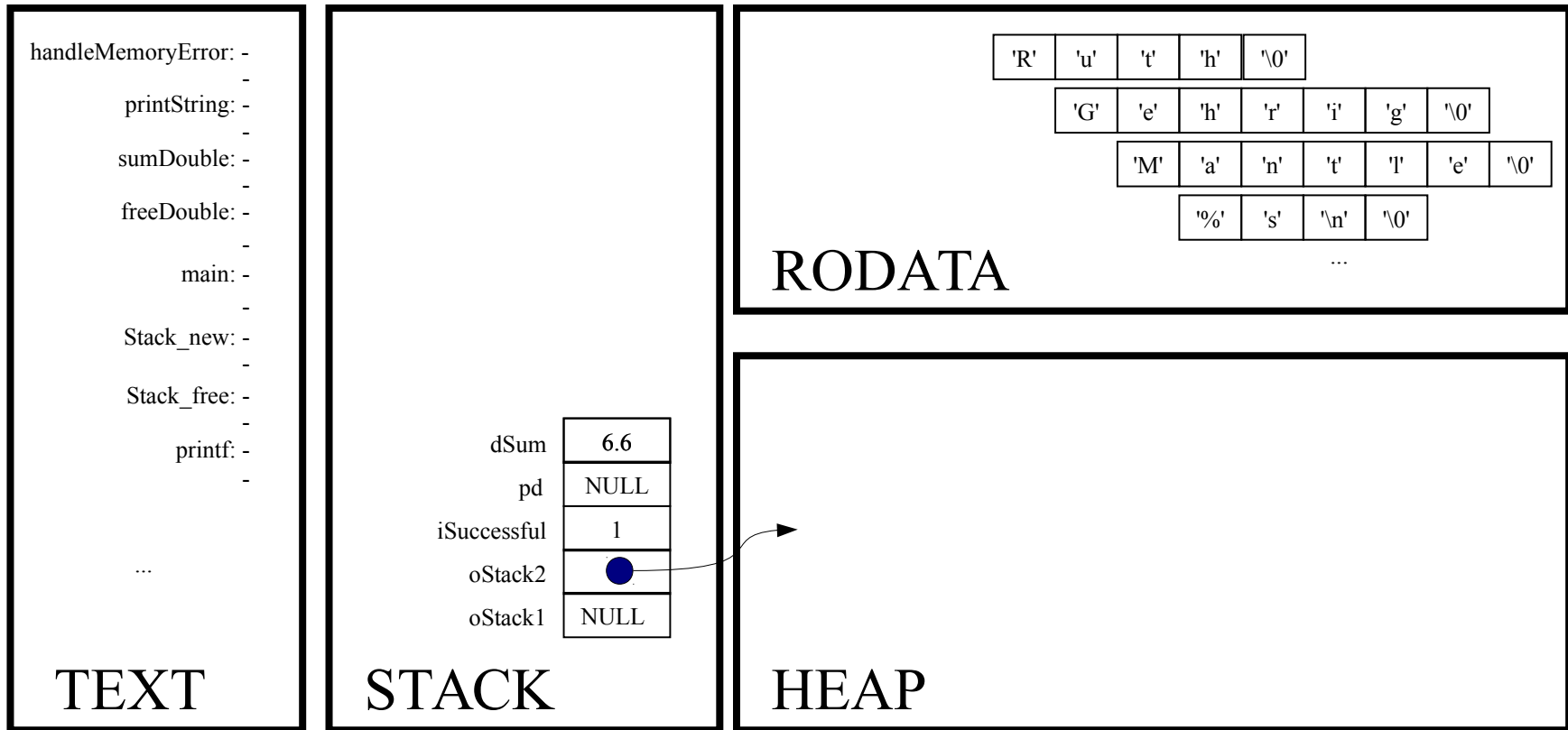
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```
free(oStack);
```



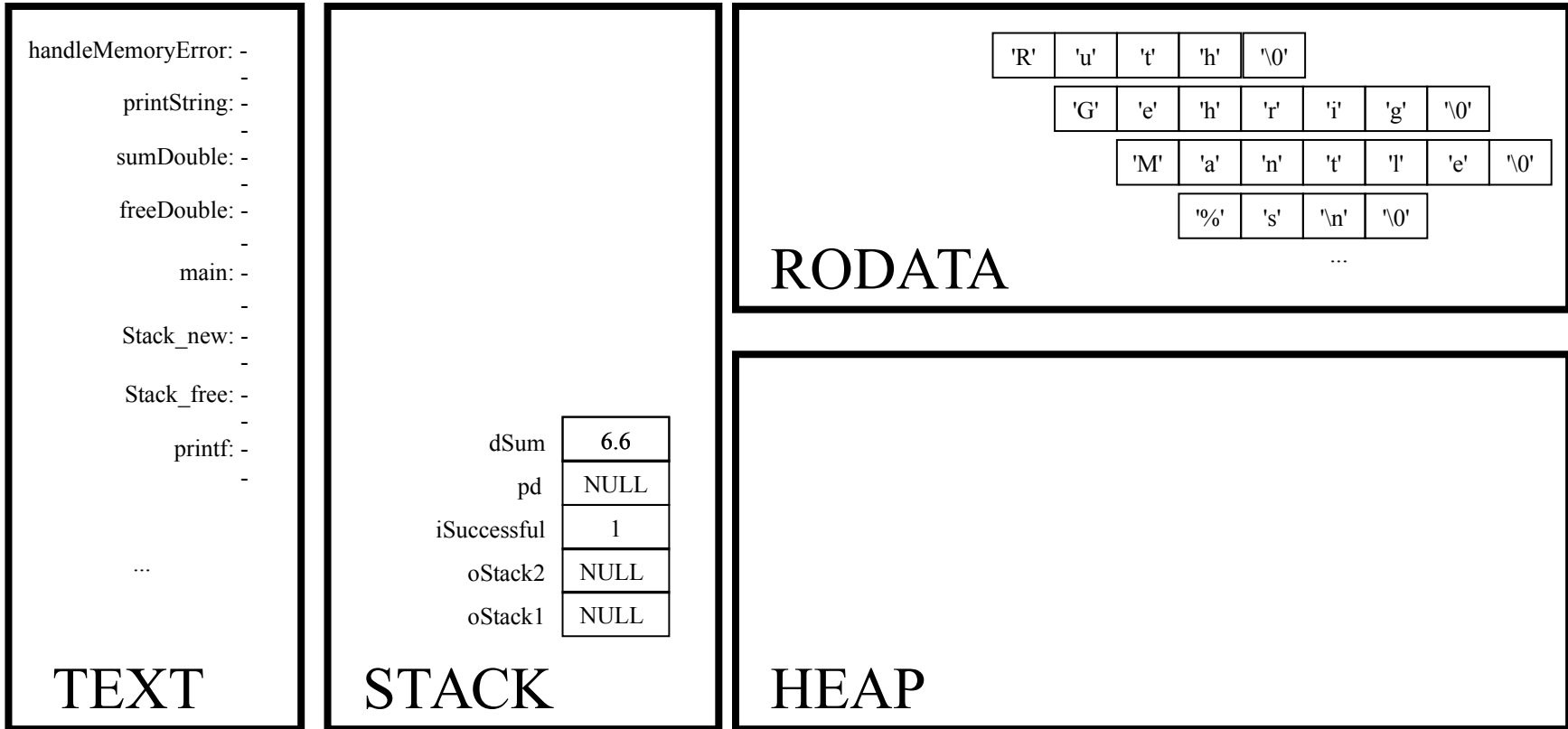
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Implicit return



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```
oStack2 = NULL;
```



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```
return 0;
```

