

Code Tracing

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Variables in Main Function values over time

```
int s = 5 ;  
int t = 4 ; 10 ;  
int y = 41 ; 10 ;  
int z = 34 ;
```

} Changed due to pass by reference

Local Variables in gigEm over Time

```
int c = 5 ; 1 ;  
int d = 4 ; 10 ;  
int temp = 40 ; 41 ;
```

} Deallocated on the stack by the compiler once function is done

← Returned to main (stored in y)

Local Variables in First howdy call over time

```
int a = 5 ; 1 ;  
int b = 10 ; 30 ;  
int temp = 40 ;
```

} Deallocated on the stack by the compiler once function is done

← Returned to gigEm (stored in temp)

Local Variables in second howdy call over time

```
int a = 41 ; 10 ;  
int b = 5 ; 15 ;  
int temp = 34 ;
```

} Deallocated on the stack by the compiler when function is done.

← Returned to main (stored in z)