

memory

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|----------|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|---|
| address: | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| value: | ? | 5 | 7 | ? | | | | | | | | | | | | ? |

```
int main(){  
    int a;  
    int b=5;  
    int c=7;  
    cout<<a<<" "<<b<<" "<<c<<endl;  
    return 0;  
}
```

The diagram illustrates the memory layout and variable storage for the provided C++ code. A memory table shows addresses 0 to 14. Address 0 contains a question mark, address 1 contains the value 5, address 2 contains the value 7, and address 3 contains a question mark. A horizontal orange line spans from address 4 to address 14. Below the table, the C++ code is shown. Blue arrows indicate variable storage: one from 'int a;' to address 0, one from 'int b=5;' to address 1, and one from 'int c=7;' to address 2. Red arrows indicate output: one from 'a' in 'cout<<a' to address 0, one from 'b' in 'cout<<b' to address 1, and one from 'c' in 'cout<<c' to address 2.