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CP 111

**SOURCE CODE AND RAM DIAGRAM
DISECTION OF THE
SECOND C++ PROGRAM**

```
#include<iostream>
using namespace std;

int main(){
    int x;
    int y;
    int z;

    cout<<"Ingiza x"<<endl;
    cin>>x;
    cout<<"Ingiza y "<<endl;
    cin>>y;

    if(x>y){
        z = x/y;
    }
    else{
        z = y/x;
    }

    cout<<"Jibu ni : "<<z<<endl;

    return 0;
}
```

RAM

FREE
FREE
FREE
FREE
FREE
FREE
FREE
FREE

**State of the RAM before
declaring any variable
within the program**

RAM

x	RESERVED
y	RESERVED
z	RESERVED
	FREE
	FREE
	FREE
	FREE
	FREE

**The state of RAM when
the first and second
variables “x” and “y”
and “z” are declared.**

RAM

x	RESERVED
y	RESERVED
z	RESERVED
	FREE
	FREE
	FREE
	FREE
	FREE

If($x > y$)

**The state of RAM when
the two variables are
compared, and a
specific output is
produced in which the
results of the division
is stored in variable “z”**

x / y

