

Student Name | JOSEPH G MAHEMBEGA

Student REG NO | T21-03-00229

CP 111

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

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

int main(){
    int umri;

    cout<<"Ingiza umri wako "<<endl;
    cin>>umri;

    if(umri >= 18){
        cout<<"Mtu mzima"<<endl;
    }
    else{
        cout<<"Bado Mtoto"<<endl;
    }

    return 0;
}
```

RAM DIAGRAM OF umri.cpp Program

RAM



State of the RAM before
initializing or declaring
any variable within the
program

RAM



The state of RAM when
the variable "umri" is
declared

RAM



Umri >= 18 ?

The state of the RAM
when the selection
condition is executed
due to the stored value
of age in the variable
"umri"

RAM	
umri	19
	FREE
	FREE
	FREE
	FREE
	FREE
	FREE
	FREE

Umri >= 18 ?

The state of the RAM when the user enters the value of age which is greater or equal to 18, and is stored int the variable “umri”, hence used as a condition in the selection if statements to produce an output

RAM	
umri	12
	FREE
	FREE
	FREE
	FREE
	FREE
	FREE
	FREE

Umri < 18 ?

The state of the RAM when the user enters the value of age which is less than 18, and is stored int the variable “umri”, hence used as a condition in the selection if statements to produce an output