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CP 111

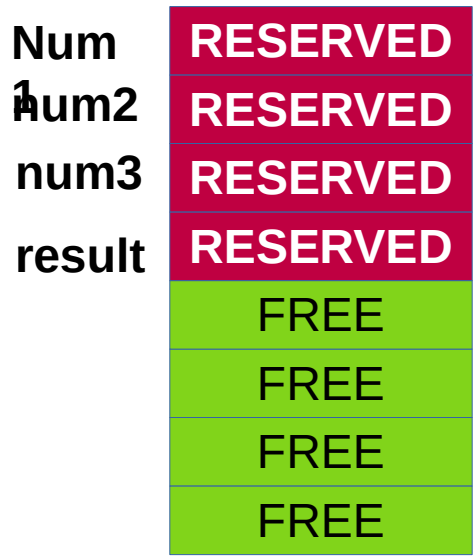
SOURCE CODE AND RAM DIAGRAM DISECTION OF THE ASSIGNMENT 1 C++ PROGRAM

```cpp
// Approach 1 --> With user input

#include<iostream>
using namespace std;

int main(){

    int num1,num2,num3,total;

    cout<<"Enter the first number : ";
    cin>>num1;

    cout<<"Enter the second number : ";
    cin>>num2;

    cout<<"Enter the third number : ";
    cin>>num3;

    total = num1 + num2 + num3;
    cout<<"The sum of the two numbers is : "<<total<<endl;


    return 0;
}




// approach 2 --> without user input

#include<iostream>
using namespace std;

int main(){

    int num1, num2, num3,result;

    num1 = 5;
    num2 = 8;
    num3 = 7;
    result = num1 + num2 + num3;

    cout<<"The total of 3 numbers is : "<<result<<endl;
}
```

RAM

State of the RAM before declaring any variable within the program

RAM



The state of RAM when the variables “num1”,“num2”, “num3” and results are declared.

RAM

num1 + num2 + num3

The state of RAM when the variable results is initialised as: num1 + num2 + num3.

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num1 + num2 + num3

The state of RAM when the num1,num2 and num3 variables are initalised according to user input, hence the value of result is calculated as 113 hence stored in the memory

On ource code Approach 2

num1 + num2 + num3

The state of RAM when the variables num1,num2 and num3 are initialised to as 5, 8 , and 7 respectively, hence resulting to the value 20, hence stored in the variable result, which is an abstract in the memory location