VIT - Vellore

Name: DIVYANSHU SINGH .
Email: divyanshu.singh2024a@vitstudent.ac.in
Roll no: 24BCT0101
Phone: 9999999999
Branch: PRIYADHARSINI M_OOPS
Department: admin
Batch: VL2024250502354
Degree: admin

Scan to verify results

BCSE102P_Structured and Object Oriented Programming Lab_VL2024250502354

VIT V_Structured and OOP_Lab 5_COD_Easy_Constructors Destructors

Attempt : 1
Total Mark : 20
Marks Obtained : 20

Section 1 : Coding

1. Problem Statement

Alex is creating a simulation to track the creation and destruction of objects in a program. Each object is represented by an instance of the man class. Every time a new object is created, a message is printed indicating its creation number. Similarly, when an object is destroyed, a message is printed indicating its destruction order.

Write a program to simulate the creation of n objects and track the order in which they are created and destroyed.

Answer

```
#include<iostream>
```

```
using namespace std;
class create{
    public:
    int n;
    create(){
    cin>>n;
    for(int i=1;i<=n;i++){
        cout<<"Created"<<" "<<i<<endl;
    }
    for(int i=n-1;i>=0;i--){
        cout<<"Destroyed"<<" "<<i<<endl;
    }
    }
};
int main(){
    create();
    return 0;
}
```

Status : Correct **Marks : 10/10**

2. Problem Statement

Create a program that calculates and prints the areas of two walls. Define a class called Wall with private attributes for length and height. Initialize these variables using a constructor. In the main function, read the dimensions for two walls. Use a member function called calculateArea in the class to calculate the area. Read inputs for two walls and print the result.

Formula:

Area = length * height

Answer

```
#include<iostream>
using namespace std;
class area1{
    public:
    void area2(){
```

```
    float n,m;
    area1 w;
    for(int i=0;i<2;i++){
        cin>>n>>m;

        cout<<"Area of Wall"<<" "<<i+1<<":"<<" "<<n*m<<"\n";
    }}
};
int main(){
    area1 u;
    u.area2();
    return 0;
}
```

Status : Correct **Marks : 10/10**