

1. Write a c++ program to print the name of the student by creating a student class . If number and name is passed while creating the object of a student class;then the name should be unknown otherwise the name should be equal to screen value while creating the object of the student class?

PROGRAM:

```

1 using namespace std;
2 #include<iostream>
3 class student
4 {
5     int no;
6     char*name;
7 public:
8     student();
9     student(int,char*);
10    void display();
11};
12 student::student()
13 {
14     no=0;
15     name="unknown";
16 }
17 student::student(int x,char*y)
18 {
19     no=x;
20     *name=y;
21 }
22 void student::display()
23 {
24     cout<<"no="<<no;
25     cout<<"name="<<name;
26 }
27 int main()
28 {
29     student s(0,"k");
30     s.display();
31 }
  
```

Output: Process exited after 0.5289 seconds with return value 3221225477  
Press any key to continue . . .

2. Create a class name rectangle with two data members length and breadth and a function to calculate the area of the rectangle. This class contains three constructor , one is having no parameters , two is having two parameters and last one is having only one parameter?

PROGRAM:

```

1 using namespace std;
2 #include<iostream>
3 class rectangle
4 {
5     int len,bry;
6 public:
7     rectangle();
8     rectangle(int,int);
9     rectangle(int);
10    void display();
11};
12 rectangle::rectangle()
13 {
14     len=0;
15     bry=0;
16 }
17 rectangle::rectangle(int x,int y)
18 {
19     len=x;
20     bry=y;
21 }
22 rectangle::rectangle(int d)
23 {
24     len=d;
25     bry=d;
26 }
27 void rectangle::display()
28 {
29     len*len;
30     cout<<"area of rectangle "<<len;
31 }
32 int main()
33 {
34     rectangle r(4,6);
35     r.display();
36 }
  
```

Output: area of rectangle 24  
Process exited after 0.0917 seconds with return value 0  
Press any key to continue . . .

3. Create a class had amount with the data member is amount with initial values is 50. Now make two constructor with their class i.e., no parameter ,then no amount is added and having parameters , then the amount is added into your account?

PROGRAM:

The screenshot shows an IDE with the following components:

- Source File:** `add amount constructor.cpp`
- Code:**

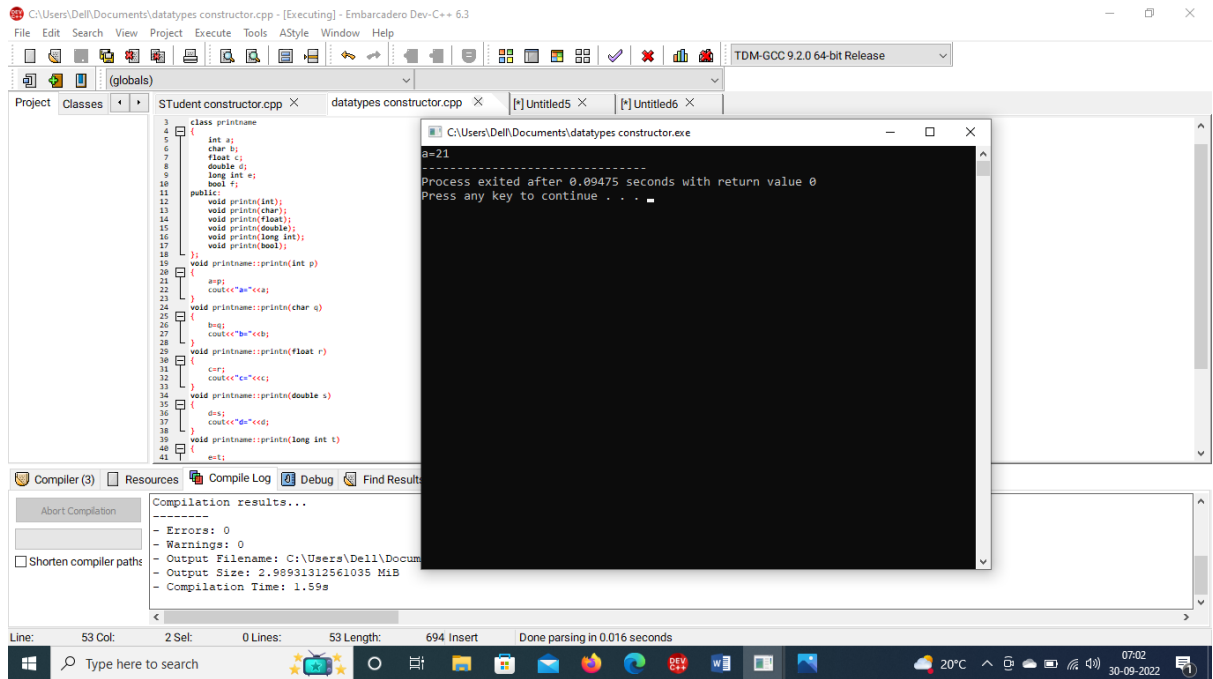
```
1 using namespace std;
2 #include<iostream>
3 class addamount
4 {
5     float amount,totalamount;
6 public:
7     addamount();
8     addamount(float);
9     void display();
10 };
11 addamount::addamount()
12 {
13     amount=50;
14 }
15 addamount::addamount(float x)
16 {
17     amount=x;
18 }
19 void addamount::display()
20 {
21     totalamount=amount+50;
22     cout<<"total amount "<<totalamount;
23 }
24 int main()
25 {
26     addamount s(20);
27     s.display();
28 }
```
- Output Window:**

```
total amount 70
-----
Process exited after 0.1028 seconds with return value 0
Press any key to continue . . .
```
- Compiler Output:**

```
Compilation results...
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Devi\Documents\add amount constructor.exe
- Output Size: 2.9887638092041 MiB
- Compilation Time: 1.69s
```

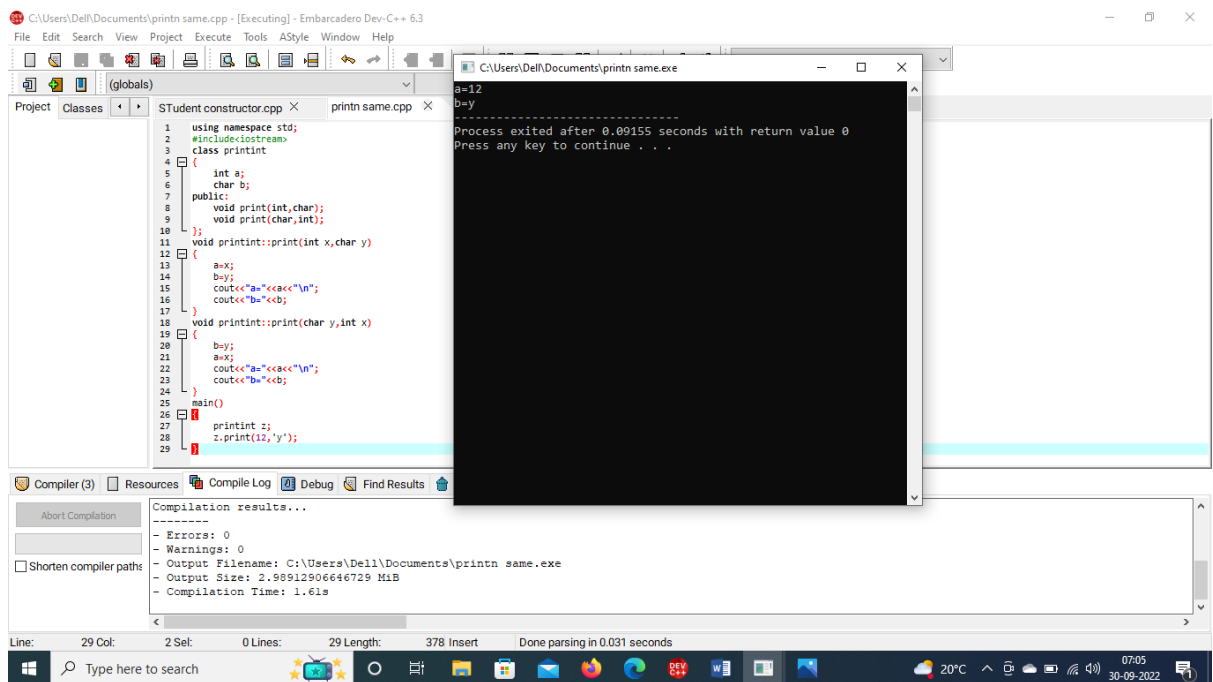
4. Create a class name print number to print various numbers of different functions with same name printn; having a parameter for each datatype?

PROGRAM:



5. Create a class to print an integer and character using truth function having the same name but different sequences of integer and character parameters?

PROGRAM:



6. Create a class student with three data ,members which are name, age and address . The constructor of the number as 0, address as not available. It has two functions with same name "said info".The first function is two parameters : name and age and second one is three parameters : name , age and address respectively .Print this details of 10 students?

PROGRAM:

The screenshot displays an IDE window titled "C:\Users\De11\Documents\student details constructor.cpp - [Executing] - Embarcadero Dev-C++ 6.3". The main editor shows the source code for a C++ program. The code defines a `student` class with attributes `name`, `rollno`, and `address`, and methods `getData()` and `display()`. The `main` function creates an array of `student` objects and calls `getData()` and `display()` for each. The output window shows the program's execution, where it prompts for student details and displays them.

```
class student
{
    char name[20], address[40];
    int rollno;
public:
    void getData();
    void display();
};

void student::getData()
{
    cout<<"Enter the student Name->";
    cin>>name;
    cout<<"Enter the student roll no->";
    cin>>rollno;
    cout<<"Enter the student address->";
    cin>>address;
}

void student::display()
{
    cout<<"\nEntered Student Details are shown below->";
    cout<<"\nname: "<<name;
    cout<<"\nrollno: "<<rollno;
    cout<<"\naddress: "<<address;
}

int main()
{
    student s[10];
    for(int i=0; i<10; i++)
    {
        s[i].getData();
    }
    for(int j=0; j<10; j++)
    {
        s[j].display();
    }
    return 0;
}
```

Enter the student address=yk  
Enter the student Name=gnj  
Enter the student roll no=569  
Enter the student address=bi  
Enter the student Name=jkh  
Enter the student roll no=987  
Enter the student address=vjh  
Enter the student Name=vjk  
Enter the student roll no=458  
Enter the student address=jhfk  
Enter the student Name=rgt  
Enter the student roll no=897  
Enter the student address=fke  
Enter the student Name=tyu  
Enter the student roll no=766  
Enter the student address=hjjgu  
Enter the student Name=yiukm  
Enter the student roll no=988  
Enter the student address=jhgj  
The Entered Student Details are shown below=  
name:  
ert  
rollno:  
123  
address:  
ap  
The Entered Student Details are shown below=

Compilation results...  
- Errors: 0  
- Warnings: 0  
- Output Filename: C:\Users\De11\Documents\student details constructor.exe  
- Output Size: 2.98915958404541 MiB  
- Compilation Time: 1.61s

Line: 40 Col: 2 Sel: 0 Lines: 40 Length: 718 Insert Done parsing in 0.016 seconds