

EXPERIMENT 8

Write a program to demonstrate the compile time and run time polymorphism (operator overloading Binary)

- ① WAP to overload the '+' operator so that two strings can be concatenated.
- ② Write a program to create a base class Ilogin having data members name and password. Declare accept() function and derive Email login and Membership login classes from Ilogin. Display Email login details and membership login details of the employee.

```
① #include <iostream>
#include <string>
using namespace std;
class join
{
    string a, b;
public:
    void accept()
    {
        cout << "Enter first string:";
        cin >> a;
        cout << "Enter second string:";
        cin >> b;
    }
    string concatenated()
    {
```



```
cout << " name : " << name << endl;  
cout << " password : " << password << endl;
```

```
{
```

```
{
```

```
class Email login : public I login
```

```
{
```

```
private:
```

```
    string email;
```

```
public:
```

```
void accept() override
```

```
{
```

```
    cout << " Email login : " << endl;
```

```
    I login :: accept();
```

```
    cout << " Enter email : " ;
```

```
    cin >> email ;
```

```
}
```

```
void display() override
```

```
{
```

```
    cout << " Email login Details are : " << endl;
```

```
    I login :: display();
```

```
    cout << " Email : " << email << endl;
```

```
}
```

```
}
```

```
int main()
```

```
{
```

```
    Email login email user,
```

```
    Membership login member user;
```

```
    cout << " Enter email login details : " << endl;
```

```
    email user . accept();
```

```
    cout << "\n Enter Membership login details : " << endl;
```



```
    return a+b;
}
}
int main()
{
    join j;
    j.accept();
    string result = j.concatenated();
    cout << "Concatenated string is : " << result
    << endl;

    return 0;
}
```

```
② #include <iostream>
#include <string>
using namespace std;
class Ilogin
{
protected:
    string name;
    string password;
public:
    virtual void accept()
    {
        cout << "Enter name : ";
        cin >> name;
        cout << "Enter password : ";
        cin >> password;
    }

    virtual void display()
    {

```



```
emailuser.accept();
memberuser.display();
cout << "\n Displaying email login details : "
<< endl;
```

```
emailuser.display();
cout << "\n Displaying Membership login Details : "
<< endl;
```

```
memberuser.display();
return 0;
```

Output - Enter email login details :

Email login :

Enter name : anushka

Enter password : nush@2007

Enter email : anushka.singh@gmail.com

Enter Membership login details :

Membership Login :

Enter name : Anushka

Enter password : anujj

Enter membership ID : 1111

Displaying Email Login details:

Name : anushka

password : nush@2007

email : anushka.singh@gmail.com

Displaying Membership Login details:

Name : Anushka

password : anujj

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