

C++ PROGRAMS

Classes & Object, Member Functions

C++ Program to access public data member.

```
#include<iostream>
using namespace std;
class student
{
    public:
    int rollno;
};
int main()
{
    student a;
    student b;
    a.rollno=101;
    b.rollno=102;
    cout<<"Roll no of A is"<< a.rollno;
    cout<<"Roll no of B is"<< b.rollno;
    return 0;
}
```

C++ Program to access private data member.

```
#include<iostream>
using namespace std;
class student
{
    private:
    int rollno;
    public:
    void readdata(int rollno)
    {
        rollno=rn;
    }
    void show()
    {
        cout<< rollno;
    }
};
int main()
{
    student a, b;
    a.readdata(101);
    b.readdata(102);
    cout<<"Roll no of A is";
    a.show();
    cout<<"Roll no of B is";
    b.show();
    return 0;
}
```

C++ Program to illustrate the working of objects and class .

```
#include<iostream>
using namespace std;
class Student
{
    public:
        int id;
        string name;
};
int main()
{
    Student s1;
    s1.id = 201;
    s1.name = "jpwebdevelopers";
    cout<< s1.id<< endl;
    cout<< s1.name<< endl;
    return 0;
}
```

C++ Program to define member function inside the class definition.

```
#include<iostream>
using namespace std;
class employee
{
    int empid,salary;
    public:
    void display()
    {
        empid=101;
        salary=10000;
        cout<<"employee id is"<< empid << endl;
        cout<<"employee salary is"<< salary;
    }
};
int main()
{
    employee e;
    e.display();
    return 0;
}
```

C++ Program to define member function outside the class definition.

```
#include<iostream>
using namespace std;
class employee
{
    int empid,salary;
    public:
    void display();
};
```

```

};
void employee::display()
{
    empid=101;
    salary=10000;
    cout<<"employee id is"<< empid << endl;
    cout<<"employee salary is"<< salary ;
}
int main()
{
    employee e;
    e.display();
    return 0;
}

```

C++ Program to for inline function.

```

#include<iostream>
using namespace std;
inline int addnum(int x,int y)
{
    return (x+y);
}
int main()
{
    int a=5;
    int b=10;
    cout<< addnum(a,b);
    return 0;
}

```

C++ Program to for Static function.

```

#include<iostream>
using namespace std;
class employee
{
    static int empid,salary;
public:
    static void display()
    {
        cout<<"employee id is"<< empid << endl;
        cout<<"employee salary is"<< b.rollno;
    }
}
void employee::display()
{
    empid=101;
    salary=10000;
    cout<<"employee id is"<< empid << endl;
    cout<<"employee salary is"<< salary;
}
};
int employee :: empid=101;
int employee :: salary=2000;

int main()

```

```

{
    employee e;
    cout<<"Printing through object name";
    e.display();
    cout<<"Printing through class name";
    employee ::display();
    return 0;
}

```

C++ Program to for Friend function.

```

#include<iostream>
using namespace std;
class add
{
    int a, b;
public:
    void input()
    {
        cout<<"Enter the value of a and b";
        cin>>a>>b;
    }
    friend void sum(add obj);
};
void sum(add obj)
{
    int c;
    c=obj.a+obj.b;
    cout<<"Sum is = "<< c;
}
int main()
{
    add aobj;
    aobj.input();
    sum(aobj);
    return 0;
}

```