Q. Write an OOP to calculate factorial of the number given by the user make sure that your class should have seperate member functions for intializing, inputting, calculating and displaying

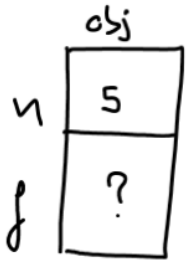
```
class Fact
{
    int n;
    int f;
public:
    void init( );
    void get( );
    void calculate( );
    void show( );
};
```

```
void Fact::init( )
{
    f=1;
}

void Fact::get( )
{
    cout<<"Enter no:";
    cin>>n;
}

void Fact::calculate( )
{
    for(int i=1; i<=n; i++)
    {
        f=f*i;
    }
}
```

```
void Fact::show()
{
 cout<<"No is "<<n;
 cout<<"It's fact is "<<f;
}
```




```
int main()
{
   clrscr();
✓ Fact obj;
  obj.init();
✓ obj.get();
✓ obj.calculate();
✓ obj.show();
  getch();
  return 0;
}
```

What is a Constructor?
==========
In C++ constructors are special member functions of a class having the following impt features :

1. They have same name as that of the class.

2. They don't have any return type, **not even void** .

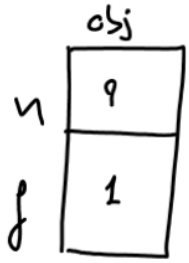
3. They are automatically called by the C++ compiler AS SOON AS the object of the class gets created.

```
clas Fact
{
    int n;
    int f;
public:
        Fact( );
    void get( );
    void calculate( );
    void show( );
};
```

```
Fact :: Fact( )
{
  f=1;
}

void Fact :: get( )
{
  cout<<"Enter no:";
  cin>>n;
}
void Fact :: calculate( )
{
  for( int i=1; i<=n; i++)
  {
    f=f*i;
  }
```

```
void Fact::show()
{
 cout<<" No is "<<n;
 cout<<" It's fact is "<<f;
}
```




```
int main()
{
   clrscr();
✓ Fact obj;

✓ obj.getc();
✓ obj.calculate();
✓ obj.show();
  getch();
  return 0;
}
```

Next class is tomorrow at 1:15 pm