

# LECTURE-5

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OBJECT ORIENTED PROGRAMMING C++

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# FOR LOOP

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Syntax:

```
for(initialization; condition check; increment/decrement)
    {statements;}
```

Example:

```
for(i=1;i<=10;i=i+1)
{
    cout<<“Hello”;
}
```

# EXAMPLE 1 (PRINT 1-10)

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```
include<iostream>
using namespace std;
class Print {
    public: int i;
    void testprint()
    {
        for(i=1;i<=100;i=i+1)
        {
            cout<<i<<endl;
        }
    };
};
```

```
int main()
{ Print T1;
    T1.testprint();
    Return 0;
}
```

# IF STATEMENT

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Syntax:

```
if(condition check)  
    {statements;}
```

Example:

```
int i=0;  
if(i==10)  
{  
    cout<<“Hello”;  
}
```

# IF ELSE STATEMENT

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Syntax:

```
if(condition check)
    {statements;}
else
    {statements;}
```

Example:

```
int i; cin>>i;
if(i%2==0)
{
    cout<<“Even number”;
}
else
{cout<<“Odd number”;}
```

## EXAMPLE 2

---

```
include<iostream>
using namespace std;
class Print {
    public: int i;
    void testprint()
    {
        for(i=1;i<=10;i=i+1)
        {
            if(i%2==0)
                cout<<"Even :"<<i<<endl;
            else
                cout<<"Odd :"<<i<<endl;
        }
    };
};
```

```
int main()
{ Print T1;
    T1.testprint();
    return 0;
}
```

## EXAMPLE 3

```
include<iostream>
using namespace std;
class Person{    string name;
                int age;
public:
    void input()
    { cin>>name;
        cin>>age; }
    void output()
    {cout<<name<<endl<<age; }
};
```

```
int main()
{ Person P1,P2,P3,P4,P5;
    cout<<"Input for P1:";
    P1.input();
    cout<<"Input for P2:";
    P2.input();
    P3.input(); P4.input(); P5.input();
    cout<<"\n Output for P1 and P2:"<<endl;
    P1.output();
    P2.output(); P3.output();
    P4.output();
    return 0;
}
```

# OUTPUT 4

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Input for person1: Farhana 38

Input for person2: Selina 30

Input for person3: Parvez 23

Input for person4: Anita 40

Input for person5: Orpita 12

Output for person1: Farhana 38

Output for person2: Selina 30

Output for person3: Parvez 23

Output for person4: Anita 40

Output for person5: Orpita 12

## EXAMPLE 4

```
include<iostream>
using namespace std;
class Person{    string name;
                int age;
public:
void input()
{ cin>>name;
  cin>>age; }
void output()
{cout<<name<<endl<<age;}
};
```

```
int main()
{ Person obj[5]; int i;
for(i=1;i<=5;i=i+1)  {
    cout<<“Input for person” <<i<<“:”;
    obj[i].input(); cout<<endl;}
for(i=1; i<=5; i=i+1)  {
    cout<<“Output for person” <<i<<“:”;
    obj[i].output(); cout<<endl;}
return 0;
}
```

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# QUESTION & ANSWER

Dr. Farhana Sarker

# NEXT LECTURE

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- Before Lecture 6 you will revise LOOPS, CONDITIONAL STATEMENTS, BREAK, LABEL
- Revision of Lecture 2-5
- Problem solving with Loops and Conditional statements.