

**Do / While Statement:**

**General Form of Do / While statement:**

**Do**

**Statement1;**

**While (condition);**

**Do**

**{**

**Statement1;**

**Statement2;**

**•**

**•**

**Statement n;**

**}**

**While (condition);**

**Example 1: i = 0;**

**do**

**{**

**cout << i;**

**i ++;**

**}**

**while ( i < 10 )**

**Output:**

**0 1 2 3 4 5 6 7 8 9 i=10**

**Example 2:** `i = 0;`

`do`

`{`

`cout << i;`

`i += 2;`

`}`

`while ( i < 10 )`

Output: *even numbers only*

0 2 4 6 8 i=10 *C++ Language LECTURE 8 L. Lamiaa M. 2016/2017*

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**Example 6:**

*Write C++ program to valid input checking, that accept the numbers between 50 ... 70 only:*

```
#include<iostream>
using namespace std;

int main()
{
int accept = 1;
int x, low = 50, high = 70;
do
{
cout << "enter number: "; cin >> x;
if ( x >= low && x <= high ) accept =1;
else
accept = 0;
}
while ( ! accept ); return 0;
}
```

**Example 7:**

*Write C++ program to find the summation of student's marks, and it's average, assume the student have 8 marks:*

```
#include<iostream>
using namespace std;

int main()
{
int mark, i, sum = 0; float av = 0;
i = 1; do
{
cout << "enter mark: "; cin >> mark;
sum = sum + mark; i++;
}
while ( i <= 8 )
cout << "sum is: " << sum << endl; av = sum / 8;
cout << "average is: " << av; return 0;
}
```

**Example 8:**

*Write C++ program to find the factorial of n:*

$$n! = n * n-1 * n-2 * n-3 * \dots * 2 * 1$$

```
#include<iostream>
using namespace std;

int main()
{
int n, f = 1;
cout << "enter positive number: "; cin >> n;
do
{
f = f * n;
n --;
}
while ( n > 1 );
cout << "factorial is: " << f; return 0;
}
```

**Example 8:**

*Write C++ program to print a certain number of times the word.*

```
#include<iostream>
using namespace std;
Int main()
{
int counter;
cout<<"How many hellos?";
cin>>counter;
do
{
cout<<" Hello\n";
counter - - ;
}
while(counter>0);
cout<<"Counter is:"<<counter<<endl; return 0;
}
```