« Programming » * Lecture 5 *

* if Statement:- « Simple Case »

- Write a program to Cout the Sentence « number=100 » only if the user entered the number 100.

- Program:

```
#include <iostream>
using namespace std;
int main()
{
  int x;
  Cin >> x;
  if (x==100)
  Cout << "number=100" << endl;
}
```

* if - else Statement:-

- write a program to Cout the Sentence « number=100 » only if the user entered the number 100, and Cout the Sentence « number!=100 » if any other number is entered.

- program:

```
#include <iostream>
using namespace std;
int main()
{ int x;
  Cin >> x;
  if (x==100)
  Cout << "number=100" << endl;
  else
  Cout << "number!=100" << endl;
}
```

- Write a program to print «pass» only if the entered mark is greater than or equal 50, and print «Fail» if the entered mark doesn't satisfy the Condition.

- program:

```
#include <iostream>
using namespace std;
int main()
{ float mark;
cin>> mark;
if(mark>=50)
Cout<<"pass"<<endl;
else
Cout<<"Fail"<<endl;
}
```

- Write a program to print out whether the entered mark is Excellent, very good, Good, pass or Fail.

- Program:

```
#include <iostream>
using namespace std;
int main()
{ float mark;
Cout<<" Enter your mark "<<endl;
Cin>> mark;
if (x>=85)
Cout<<" Excellent"<<endl;
if (x<85 && x>=75)
Cout<<" very good"<<endl;
if (x<75 && x>=65)
Cout<<" Good"<<endl;
if (x<65 && x>=50)
Cout<<"pass"<<endl;
else
Cout<<"Fail"<<endl; }
```

* if-else if statement :-

- Write the previous program using « if-else if statement. ».

- program :

```
#include <iostream>
using namespace std;
int main()
{ float mark;
  Cout << " Enter your mark" << endl;
  Cin >> mark;
  if (x >= 85)
  Cout << " Excellent" << endl;
  else if (x >= 75)
  Cout << " Very good" << endl;
  else if (x >= 65)
  Cout << " Good" << endl;
  else if (x >= 50)
  Cout << " pass" << endl;
  else
  Cout << " Fail" << endl; }
```

- Write a program to Read 2 numbers and Choose the Carried out operation. (+, -, *, /)

- Program :

```
#include <iostream>
using namespace std;
int main()
{ int a, b;
  char op;
Cout << " Enter two numbers" << endl;
Cin >> a >> b;
Cout << " Select the operation (+, -, *, /)" << endl;
Cin >> op;
if (op == " + ")
```

```
Cout<<" Sum ="<< a+b"\n";
else if (op==" - ")
Cout << " difference = " << a-b "\n";
else if (op==" * ")
Cout<< " product = " << a*b "\n";
else if (op==" / ")
Cout << " div =" << a/b "\n";
else
Cout << " Select an available operation." << endl;}
```

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* Switch Case *

- Write the previous program using Switch Case.
- program:

```
#include <iostream>
using namespace std;
int main ()
{ int x, y;
  Char op;
  Cout << "Enter two numbers" << endl;
  Cin >> x >> y;
  Cout << " Select the operation (+,-,*,/)" << endl;
  Cin >> op;
  Switch (op)
  { Case '+':
    Cout << " Sum =" << x+y;
    break;
    Case '-':
    Cout << " difference =" << x-y;
    break;
    Case '*':
    Cout << " product =" << x*y;
    break;
```

```
Case '/':
Cout << " div=" << x/y;
break;
default;
Cout <<" Select an available operation." << endl;}
}
```