

If else, ternary & switch

Lecture-4

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Control Statements

(continued)



```
#include<iostream>
using namespace std;
int main() {
  int x = 10, y = 20;
  if (x == y);
     return 0;
```

Output



```
int main() {
  int x = 3, y = 5;
  if (x == 3)
      cout << x << endl;
  else;
      cout << y << endl;
   return 0;
```





MATH Bimany

7 if -else compact

Ternary Operator

expression 1? expression 2: expression 3

condition 3 true : false



Ques: Given the marks of the student. If the marks are greater than 33 print the result as pass otherwise fail without using if-else statement.

```
int marks;

cin >> marks;

if (marks > 33) cont <<"Pass",

else cost << "Fail";
```

```
#include<iostream>
using namespace std;
int main(){
   char X;
   int a = 2;
  \sqrt{x} = (a > 0) ? 'a' : 'S';
  cout << "Value of x : " << x << endl;
  cout << "Value of a : "<< a;
    return 6;
```

```
· Value of a: 2
```



int x; int y = 3; if (y > 4) x = 1; else x = 2;

```
Predict the output
```

```
int main(){
 int x:
```

```
\sqrt{x} = 5 > 8? 10 : 1!= 2 < 5 ? 20 : 30;
cout << "Value of x : "<<x;
```

```
Duthut
  Value of x: 30
```



```
int main(){
  int test = 0;
  float f = 3.111;
  cout << (test > 0 ? f : 0) << endl;
   return 0;
```

Outhut



Switch Statement

alternative of if-else statement



```
switch (integer expression) {
  case constant 1:
      do this;
   case constant 2:
      do this;
   case constant 3:
      do this;
   default:
      do this;
```

Syntonx

```
Switch (x) {
   COLL
     cont < c "ok";
   Coste 2:
       Cout << "bello":
   Case 3:
        Cout << "Bye";
```



Ques: Write a program to input week number(1-7) and print day of week name using switch case.

```
1 - Monday
Z Jues
3 -3 Wed
4 Thuls
5 + Fm
5 sat
J. J. Cun,
```



Ques: Write a program to input month number and print total number of days in month using switch case.

```
Switch (condition) {
1 1 3 Jan 3
                     COMME :
2 - Feb - 28
                        do tus
3 - March - 31
4 3 April 30
 5 my 31
 6 - June 130
 7 - July - 31
```

SKILLS

*Ques: Write a program to create a calculator that performs basic arithmetic operations (add, subtract, multiply and divide) using switch case and functions. The calculator should input two numbers and an operator from user.

```
int a,b;

cin >> a >> b;

char ch;

cin >> ch;
```

```
int main() {
 int x = 3, y, z;
 y = x = 10;
Z = X < 10
```

```
Predict the output
```

outfut
$$n = 10 \text{ y} = 102 = 0$$

/cout << "x = " << x << "y = " << y << "z = " << z ;</pre> return 0;



Outhut

```
#include<iostream>
using namespace std;
int main() {
 int k = 35;
cout <<( k == 35) <<endl << (k == 50) <<endl << (k > 40);
   return 0;
```

```
#include<iostream>
using namespace std;
int main() {
 int k = 35;
  \sqrt{\text{cout}} << (k == 35) << \text{endl} << (k == 50) << \text{endl} << (k > 40);
    return 0;
```



```
#include<iostream>
using namespace std;
int main() {
    int i = 65;
    char j = 'A';
    if ( i == j)
    cout << "P stands for PhysicsWallah" ;
    else
    cout << "P stands for pwskills";
    return 0;
```

```
Output-
P stands for PW
```



The Real Thing:

```
if (3+2%5)
  cout << "This works" { < < endl;

if (a = 10)
  cout << "Even this works" { < < endl;

if (-5)
  cout << "Surprisingly even this works" {</pre>
```

Outhut

- · Jus works
- + Even this works
- * Surprisingly even this works



The Real Thing:

```
if ( condition )
    statement;

if ( expression )
    statement;
```



THANKYOU

Loops, Loops, PP-1, PP-2
Problems