

④ Ternary Operators

Shortcut for if-else

Condition? true-part : false-part ;

Used when their is small conditions

⑤ Switch Case

Switch (expression) {

Case 1:

// code

break;

Case 2:

// code

break;

default:

// code

}

Example calculator

int a,b;

char op;

Cin >> a >> op >> b;

switch(op) {

case '+':

cout << a+b;

break;

case '-':

cout << a-b;

break;

case '*':

cout << a*b;

break;

case '/':

cout << a/b;

break;

default:

cout << "invalid operator";

}

Exercise: Make a student grade evaluation system.

• take student name.

• Take marks

• Decide grade.

• Check pass fail.

• Give special message for distinction

④ Multiple Conditions (if and if)

if → and

if → or

⑤ Nested if-else

Nested means if inside another if

Example

int a, b;

On >> a >> b >> c ;

if (a > b) {

 if (a > c) {

 cout << "greater is a" ;

 }

else {

 cout << "greatest is C" ;

}

⑥ If-else ladder:

↳ used when you have many conditions

if (condition) {

 y

else if (condition) {

 y

else if (condition) {

 y

else {

 y

char and ASCII
 * Char stores a single character.
 char ch = 'a';
 cout << ch; // a

* ASCII conversion char ch = 'a'; cout << (int)ch; // 97	a - 97 Z - 122 A - 65 Z - 90
--	---------------------------------------

Chapter-2 (Conditionals)

(conditional means decision making in the program)

① if statement

if condition is true code will run other wise code will skip

Syntax: if (condition){
 // code run if condition is true
 y
} // Another { }
 // Another { }

② if-Else

if condition is true run if block Else run else block

if (condition){
 // code.

y

else {

 // false

y

③ Comparison operators

= Equal to
 != Not equal
 > Greater than
 < Less than
 == " equal to
 != " "

Increment / decrement

* Post increment ($i++$)

int x = 4;

Cout << x++ << endl; // First print 4

Cout << x << endl; // Print x = 5

* Pre increment ($++i$)

int x = 4;

Cout << ++x << endl; // First print 5

float data type

float = real numbers

float x = 3.1;

float x = 5;

float y = 2;

Cout << x/y << endl; // 0.5

Comments in CPP

Single line comment

(//) ex: // Krish

Multi-line comment

/* this is

taking input from a user (std::cin) or (Cin)

int n; // we use int

Cin >> n; // in Cin, we use >> operator

Cout << n; // in Cout we use << operator

type casting (float \leftrightarrow int)

int x = 5;

float y = 2; // 5.0

float a = 5.9 //

int b = int(a) // 5

always lower value.

CppC complete Notes

Chapter(1) - Basic of C++

basic structure of python.

```
#include <iostream>
using namespace std;
int main() {
    cout << "Hello world";
    return 0;
}
```

→ for input output → do we can write cout instead of cout << "Hello world"; → program starts of std::cout

→ do we can write cout instead of cout << "Hello world"; → program ended

variables and data types

variable = container (dabba)

```
int x;
x = 5;
cout << x << endl; # 5
x = x + 6;
cout << x << endl; # 11
x = 7
cout << x << endl; # 7
```

endl is use for line change same as \n. in C.

Arithmetic operators.

```
int x = 5;
int y = 2;
cout << x + y << endl; # 7
cout << x - y << endl; # 3
cout << x / y << endl; # 2 important
cout << x * y << endl; # 10
```

file explain left to right hierarchy (BODMAS X).

in CPP int / float give integer ans so we go 2 in of 2.5 unlike Python.

```
cout << x % y << endl # 1
L gives remainder like in Python.
```