

# C Language

## Chapter # 8

## Getting started with C

## Lecture: 04

# Today's Lecture

## Basic Structure of C program

# Basic Structure of C program

- ▶ The format of writing C program is called its structure.
- ▶ The basic structure of a C program is very flexible.
- ▶ It increases the power of the language.

# Basic Structure Parts

**It consists of following parts.**

- ▶ Preprocessor directive
- ▶ Main function
- ▶ Program body(C statements)

# Basic Structure Parts

- ▶ 1. **preprocessor directive**

```
#include<stdio.h>
```

- ▶ 2. **main function**

```
void main()
```

- ▶ 3. **Program body(C statements)**

```
{  
    Printf("Hello World");  
}
```

# 1.Preprocessor Directive

- ▶ preprocessor directive is an instruction given to the compiler before the execution of actual program.
- ▶ preprocessor directive are processed by a program known as preprocessor.
- ▶ It is part of C compiler.
- ▶ The semicolon is not used at the end of preprocessor directive.
- ▶ preprocessor directive start with hash symbol #
- ▶ The preprocessor directive is used in C to include header file in the program.

# What is Header file

- ▶ Header file are collection of standard library function to perform different tasks.
- ▶ There are many header files for different purpose.
- ▶ The header file must be included in the program before calling any of its functions in the program.

## **Example of header file**

- ▶ `#include<stdio.h>`
- ▶ `#include<conio.h>`
- ▶ `#include<math.h>`

## 2. The main function

- ▶ The main function is the place where the execution of a C program starts.
- ▶ When the program is executed, the control enters `main()` function and starts executing its statement.

# 3. Program body(C statements)

- ▶ A statement in C language is an instruction for the computer to perform a task.
- ▶ The statement are written in curly brackets.
- ▶ Computer performs these instructions one by one in the same sequence in which these instruction are written.
- ▶ Each statement in C is terminated with semicolon.

# Example C program

```
#include<stdio.h>
```

```
main()
```

```
{
```

```
    printf("pakistan");
```

```
}
```



# The End

Read this topic from your books and ask question if any confusion.

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