

# C Language

Chapter # 10

Input and Output

Lecture: 18

# Today's Lecture

- ▶ Format Specifier

# Format Specifier

- ▶ Format specifier is used to specify the format according to which the values will be read or displayed. It determines the following things.
  - Data type of variable
  - Field width
  - Format of the value

Format specifier is started with symbol %. Different format specifiers are used for different types of variables. These format specifiers are as follows.

- Integer format specifier
- Character format specifier
- Floating-point format specifier

# Integer Format Specifier

Format Specifier	Type
%d	Used for signed decimal integer values
%u	Used for unsigned decimal integer values
%o	Used for unsigned octal values
%x	Used for unsigned hexadecimal values

# How Integer values are printed

- ▶ The format specifier %d is used to display integer values in printf function. Suppose the value of integer variable m is 100. The following statement.

```
printf("Your marks are %d", m);
```

Will display the following line on the screen.

Your marks are 100

# Floating-Point Format Specifier

Format Specifier	Type
%f	Used for signed float or double values
%e	Used for signed float or double in exponential notation.
%g	Used for large floating point in exponential notation with no extra zeroes

# How Floating-Point values are printed

- ▶ The format specifier %f is used to display floating-point values in printf function. Suppose the value of float variable a is 70.55. The following statement.

```
printf("Your average is %f", a);
```

Will display the following line on the screen.

Your average is 70.550000

# Character Format Specifier

Format Specifier	Type
%c	Used for character values
%s	Used for strings

# How Character values are printed

- ▶ The format specifier %c is used to display character values in printf function.  
Suppose the value of char variable g is 'A'. The following statement.

```
printf("Your grade is %c", g);
```

Will display the following line on the screen.

Your grade is A

# How String values are printed

- ▶ The format specifier %s is used to display string values in printf function.  
Suppose the value of variable country is "Pakistan". The following statement.

```
printf("My country is %s", country);
```

Will display the following line on the screen.

My country is Pakistan



# The End

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

# JAZAKALLAH