Chapter 4 – C Building Blocks

Short Questions with Easy Answers

Q1. Define Data Type.

👉 A **data type** tells the computer what kind of data a variable can store (number, character, etc.).

- Example:

```
int age;      // stores integer
float marks;  // stores decimal
char grade;   // stores a single character
```

Q2. Define Variable.

👉 A **variable** is a named memory location where we store data.

- Example:

```
int number = 10;
```

Here number is a variable of type integer.

Q3. Define LValue.

👉 **LValue** = Something that can appear on **left side of assignment** (a variable).

- Example:

```
x = 5;   // x is LValue
```

Q4. Define RValue.

👉 **RValue** = Something that can only appear on **right side of assignment** (a value or expression).

- Example:

```
x = 10;     // 10 is RValue
y = x + 2;  // (x+2) is RValue
```

Q5. What do you mean by input in C language?

👉 Input = Giving data to program (from keyboard or file).

- Example:

```
scanf("%d", &age);   // input an integer
```

Q6. What do you mean by output in C language?

👉 Output = Displaying data from program (to screen or file).

- Example:

```
printf("Age = %d", age);
```

Q7. Explain scanf().

👉 scanf() is used to **read input** from user.

- Example:

```
int x;

scanf("%d", &x);   // user enters number
```

Q8. Explain printf().

👉 printf() is used to **display output** on screen.

- Example:

```
printf("Hello, World!");
```

Q9. What is an Operator?

👉 An **operator** is a symbol used to perform operations like math or logic.

- Examples:
  - + (addition)
  - - (subtraction)
  - * (multiplication)
  - / (division)
  - % (modulus)

Q10. How can we initialize a Variable?

👉 Initialization = Giving a variable an initial value.

- Example:

```
int x = 10;     // initialized with 10

float pi = 3.14;
```