

## VARIABLE IN C

### Definition:

A variable in C is a named memory location used to store data whose value can change during program execution.

### Syntax:

```
data_type variable_name;
```

### Example:

```
int age;
```

### Declaration and Initialization:

```
int age; // Declaration
```

```
int age = 20; // Initialization
```

### More Examples:

```
int number = 10;
```

```
float price = 99.5;
```

```
char grade = 'A';
```

### Example Program:

```
#include
```

```
int main() {  
    int age = 21;  
    printf("My age is %d", age);  
    return 0;  
}
```

### Rules for Naming Variables:

- Must begin with a letter or underscore (\_)
- Cannot start with a number
- No spaces allowed
- Cannot use C keywords as variable names
- Variable names are case-sensitive

### Key Points:

- A variable stores data.
- It must be declared before use.
- The data type defines what kind of value it can store.
- The value of a variable can change during program execution.