

Variables and Data Types in C

A variable is a name given to a memory location. It is used to store data.

Syntax:

```
datatype variable_name;
```

Example:

```
int age;
```

```
float salary;
```

Common Data Types:

- int: stores integers (e.g., 1, -5, 100)
- float: stores decimal numbers (e.g., 3.14, -0.99)
- char: stores single characters (e.g., 'a', 'Z')
- double: stores large decimal numbers

Variable Declaration and Initialization:

```
int age = 25;
```

```
float pi = 3.14;
```

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