Chapter: 1

C Programs with Mustafa Rahman

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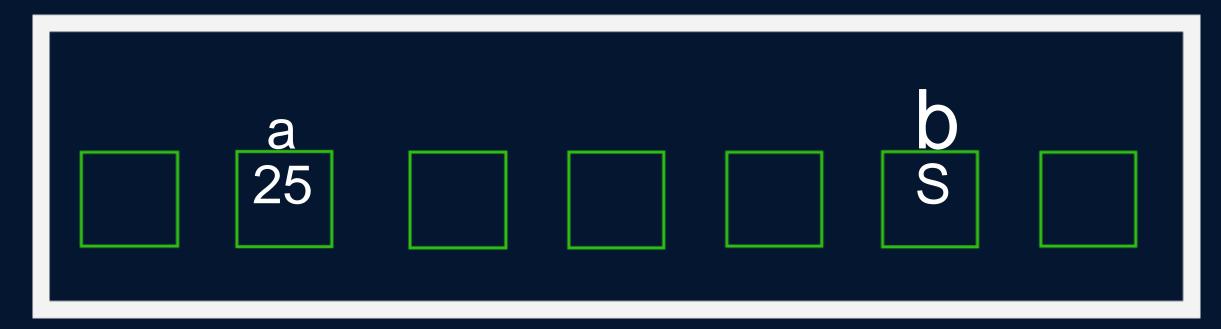




Variables

Variable is the name of a memory location which stores some data.

Memory



Variables

Rules

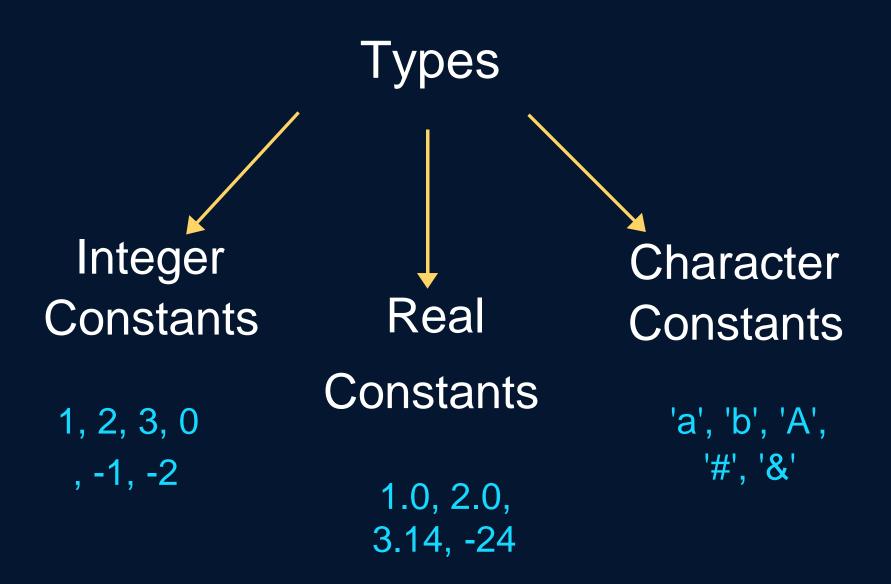
- a. Variables are case sensitive
- b. 1st character is alphabet or '_'
- c. no comma/blank space
- d. No other symbol other than '_'

Variables Data Types

Data type	Size in bytes
Char or signed char	1
Unsigned char	1
int or signed int	2
Unsigned int	2
Short int or Unsigned short int	2
Signed short int	2
Long int or Signed long int	4
Unsigned long int	4
float	4
double	8
Long double	10

Constants

Values that don't change(fixed)



Keywords

Reserved words that have special meaning to the compiler

32 Keywords in C

Keywords

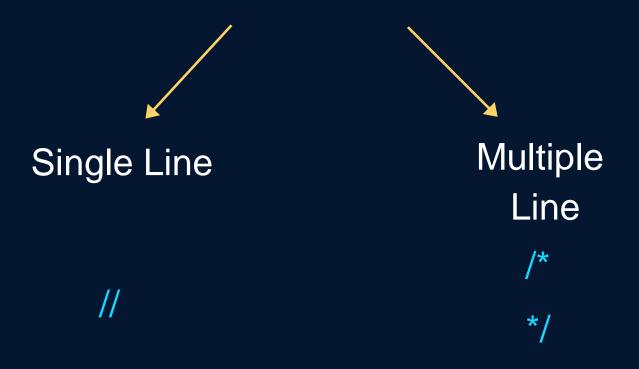
auto	double	int	struct
break	else	long	switch
case	enum	register	typedef
char	extern	return	union
continue	for	signed	void
do	if	static	while
default	goto	sizeof	volatile
const	float	short	unsigned

Program Structure

```
#include<stdio.h>
int main() {
    printf("Hello World");
    return 0;
}
```

Comments

Lines that are not part of program



Output

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

```
new line
printf(" kuch bhi \n");
```

Output

CASES

```
1.integers
printf(" age is %d ", age);
2. real numbers
printf(" value of pi is %f ", pi);
3. characters
printf(" star looks like this %c ", star);
```

Input

```
scanf(" %d ", &age);
```

Compilation

A computer program that translates C code into machine code

