//Comments
/*Comments*/
control command slash

Input in Java // square of a number

HW

```
int x = sc.nextInt();

Sout(x*x);
```

Output

```
Enter Value : 5

Square Is : 25
```

Example: Take 2,3 numbers input and print their sum

Example: Calculate Simple Interest

Modulus Operator

+, −, *, /, %

a % b is the remainder when a is divided by b.

37 % 6 = 1

5 % 3 = 2

Properties of Modulus Operator

1) $a \% b = a \quad (\text{if } a < b)$

2) $a \% (-b) = a \% b$

3) $(-a) \% b = -(a \% b)$

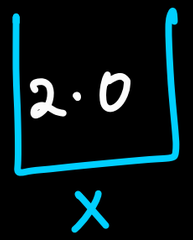
$5 \% (-2) = 5 \% 2 = 1$

$(-39) \% (-10) = (-39) \% 10 = -(39 \% 10) = -9$

int/int → int
double/int

int/double
double/double

```
double x = 5/2;
sout(x);
```



5/2 → 2

5.0/2.0 → 2.5

5.0/2 → 2.5

5/2.0 → 2.5

char Data Type

```
char x = 'a';
```

ASCII Values

a - 97
b - 98
c - 99
.
.
.
z - 122

A - 65
B - 66
C - 67
.
.
.
Z - 90

0 - 48
1 - 49
2 - 50
3
4
5
6
7
9 - 57

Typecasting

BODMAS

/, *, % > +, -

```
int x = 4 * 2 / 3 ;
```

Math

4*2/3

8/3

2.6

4*2/3

4*0.6

2.6

left to right

Java

4*2/3

8/3

2 ✓

4*2/3

4*0

0 ✗

BODMAS

$$x = 2 * 4 + 6 / 7$$

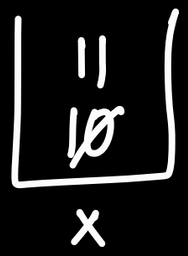
$$8 + 6 / 7$$

$$8 + 0$$

$$8$$

++x, x++, --x, x--

```
int x = 10;
Sout (x++);
Sout (x);
```



Output

- 10
- 11

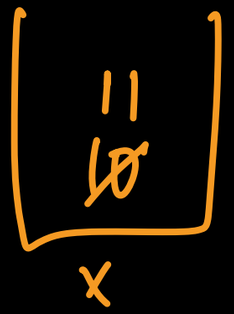
x ++

post increment

pehle use karo then badhao

++x, x++, --x, x--

- ✓ int x = 10;
- ✓ sout(++x);
- ✓ sout(x);



Output

- 11
- 11

Mark True or False

1. Each new Java instruction has to be written on a separate line F
2. Usually all Java statements are entered in small case letters T
3. Blank spaces may be inserted b/w 2 words in a Java Statement T

THANKYOU

Cuties