Basics
of Java

Rules for this lovely bfal batch

Rule no. 1 → Do not annotate

Rule no. 2 → Chup rehna hai

Rule no. 3 → Chat sirf tab karna hai jab main bolunga

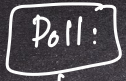
Rule no. 4 → Trust Raghav → 100%

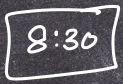
Rule no. 5 → Do not watch any DSA Roadmap

Rule no. 6 → Basic se padhaunga

Rule no. 7 → Never miss any live class

Rule no. 8 → Class Duration → Bhindi aalo sona nahi lagana





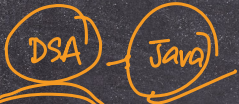
Video off karke rehna

Pls do not ask quations which are irrelevant

I am not Sandeep Maheshwari

→ Respect maintain

Chapri Pana mat karna



Rule No. 9

Is class ka ek hi gunda hai

I

Raghav

Contents

Area/Formula on Google

IntelliJ Idea and JDK Installation

Basic Program in Java

How to move in next line

Printing Text and Numbers

Variables (int)

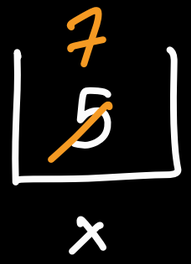
✓ int x = 5;

✓ Sout(x);

✓ x = 7;

✓ Sout (x);

✓ Sout ("Hello Niharika");

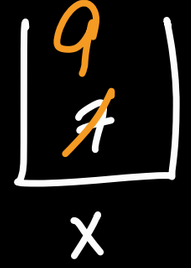


Output

- 5
- 7
- Niharika

Modifying values of Variables

```
int x = 7;
sout(x);
x = x+2;
Sout (x);
```



x = (x+2)

Output

7

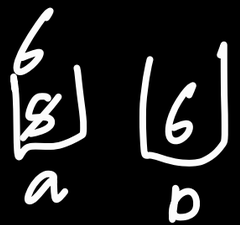
9

idhar dekho

a = 5

b = 6

a = b



Arithmetic Operations on int

Arithmetic Operations on double

Example: Calculate area of Circle

Homework: 1 Calculate Volume of Sphere

HW: 2 Calculate T.S.A. of a cuboid l, b, h

```
double l,b,h;
double tsa = 2(lb + b*h + l*h);
sout (tsa)
```

Variable Naming Rules

1. Variables can start from alphabet or _ or $
2. Special characters except _ and $ are not allowed
3. Blanks, Commas not allowed
4. Keywords not allowed

```
int x = 5;
```

x ↓ variable name

```
int raghav = 100;
```

Ques: Find out the invalid variables names

1. GEEKYRAGHAV
2. _basic
3. raghav-garg
4. #MEAN
5. group@
6. geeks for geeks
7. INT
8. Raghav’s_students
9. 420
10. x1
11. 1x
12. Public
13. raghav,garg
14. accheVariableNames

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

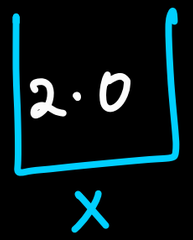
$5 \% (-2) = 5 \% 2 = 1$

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

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

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

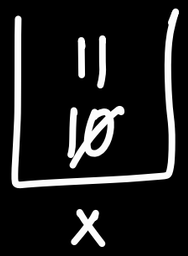
$$8 + 6 / 7$$

$$8 + 0$$

$$8$$

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

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



Output

- 10
- 11

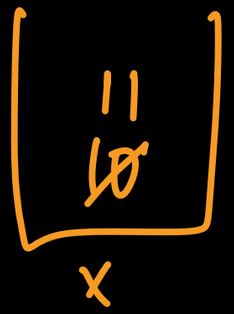
x ++

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