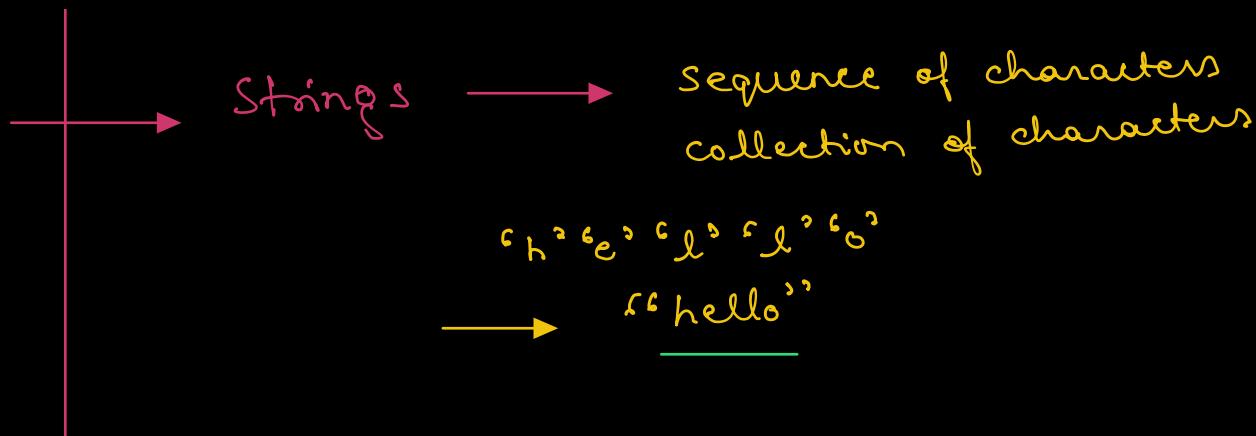


Literals & Variables

- Literals → fixed value we directly used in our program
 Eg → 7, -13.5, "C", "krishna"

Types of Literals (data/values)

- Integers (Numerical value without any decimals)
 $\rightarrow 13, 99, 981045, -77, \text{etc}$
- Floating points No. (with decimals)
 $\rightarrow -33.33, +99.67$
- Characters → '+', '\$', 'A', '
 'C', '#'

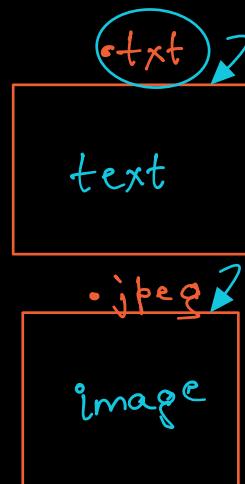


Variables

→ It is used to store data,
so that we can use it
later on in our program.

Create a variable

→ Variable name (unique)
→ data type()



Integers → age → (int)

int age;

Comment → (compiler) /*

→ it will not reflect in /*
your output */

- single line comment → //
- multi-line comment → /* */

```

class Main {
    public static void main(String[] args) {
        int age; // declaration
        age = 24; // assigning the value
    }
}

```

value / literals
variable
data-type

Memory



```

public static void main(String[] args) {
    int age; // declaration
    age = 24; // assigning the value
    System.out.println("age");
    System.out.println(age);
}

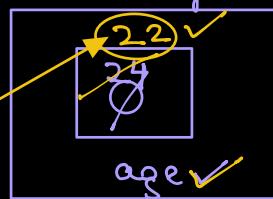
```

```

public static void main(String[] args) {
    int age; // declaration
    age = 24; // assigning the value
    System.out.println(age);
    age = 22;
    System.out.println(age);
}

```

Memory



Output 12, (7)
24
22

10 digit
5 digit
long

Data - type

short
5 digit

int
10 digit

long
15 digit

→ int (integers), short, long
→ double, float (Decimal)
→ char {character}
→ String {" " } .
double {
 Better
 Big capacity
}.
float less
more memory efficient
less space

(accuracy & precision)

✓
Container
1 100k

container
2 50k

72kg
item

```
double salary;  
salary = 129999.67;  
float price = 99.99f;  
System.out.println(salary);  
System.out.println(price);
```

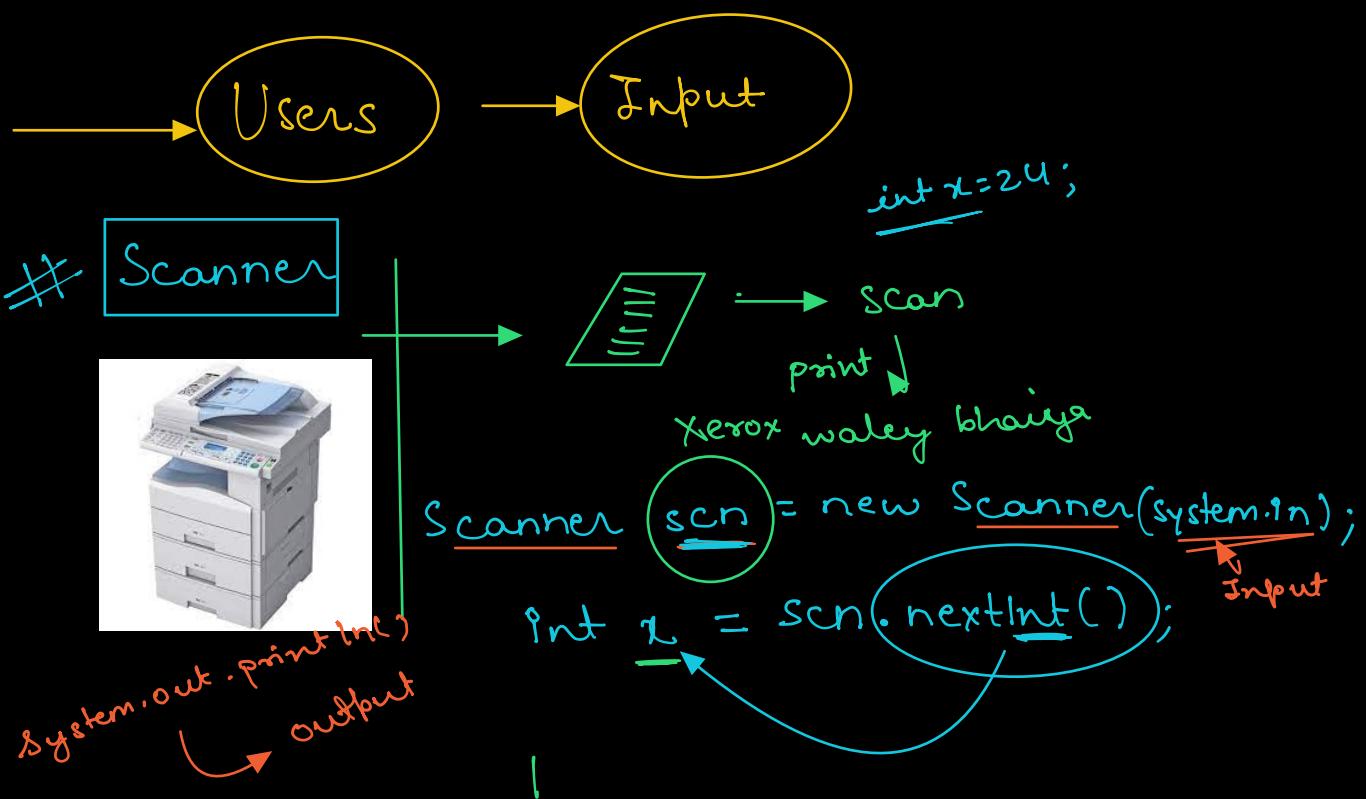
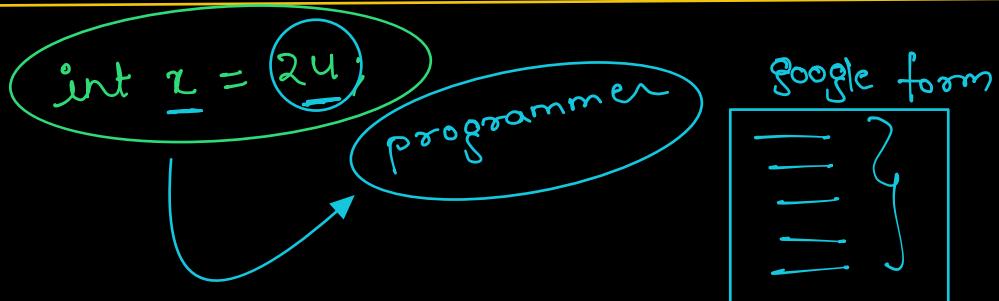
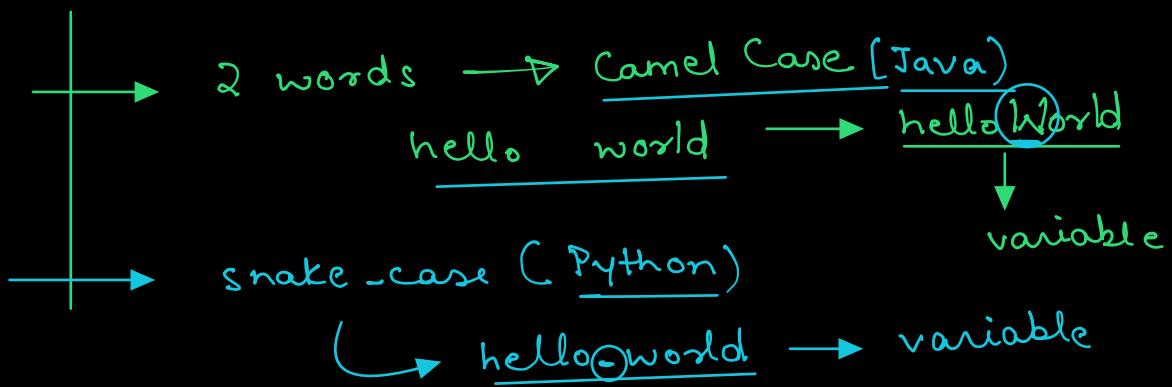
Finished in N/A

Line 6: error: incompatible types: possible lossy conversion from double to float [in Main.java]

float price = 99.99f;
 ^
 double

Rules for Naming a Variable

- Contains alphabets, digit, \$, -, ,
- Can't start with digit.
- Can't use any predefined keyword (Java syntax)
- Eg : salary ✓, salary 77 ✓, 29 salary ✗, double ✗,
totalSalary ✗

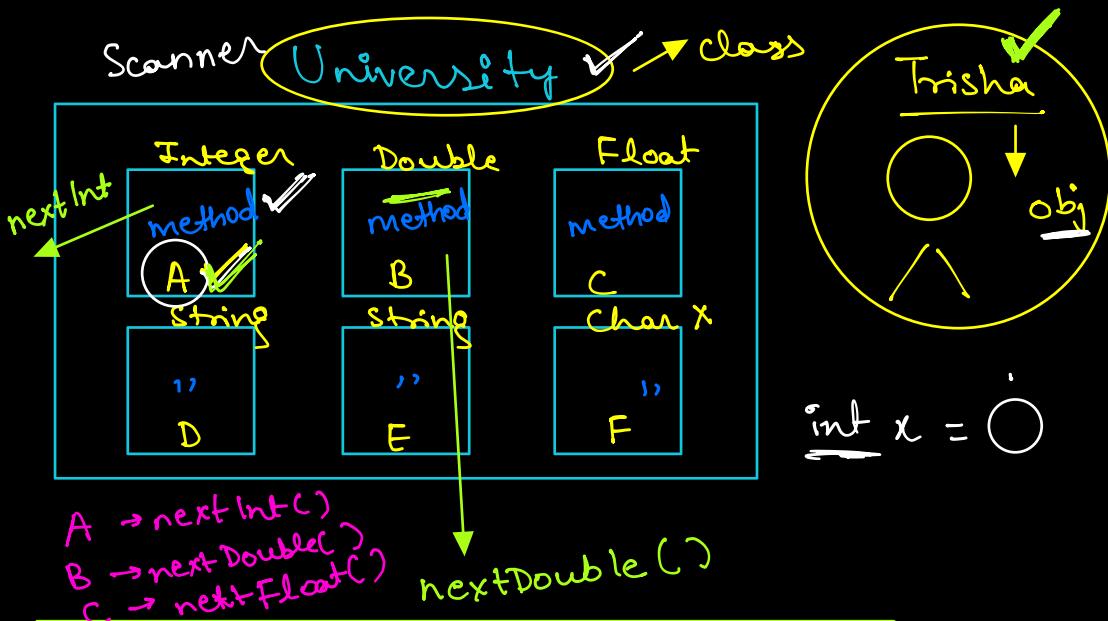


object

```

class Scanner
class System
//int x = 32;      xerox wale bhaiya
Scanner scn = new Scanner(System.in);
int x = scn.nextInt();    → 24
System.out.println(x);      method

```



```

Scanner scn = new Scanner(System.in);
int x = scn.nextInt();
double salary = scn.nextDouble();
System.out.println(x);
System.out.println(salary);

```

```

Scanner scn = new Scanner(System.in);
int x = scn.nextInt();
double salary = scn.nextDouble();
float price = scn.nextFloat();
System.out.println(x);
System.out.println(salary);
System.out.println(price);

```

user input

int x = 32;
double sal = 99.33;
float price = 33.33

programmer

Hackerrank Question

Sum and Difference of x and y

Problem

Submissions

Leaderboard

Discussions

You will be given two integers x and y . You have to print the sum of x and y in the first line, and the difference of x and y in the second line.

First integer input should be stored in x , Second integer input should be stored in y .

Input Format

In the first line the value of x will be given and in the second line the value of y will be given.

Sample Input 0

40
10
 x
 y
Input by User

Sample Output 0

50
30
sum
diff
input output

```
Scanner scn = new Scanner(System.in);
int x = scn.nextInt();
int y = scn.nextInt();
print(x+y);
print(x-y);
```

45, 10 # testCase 0 } User Input
75, 25 # test Case 1

```
1 import java.io.*;
import java.util.*;
2
3 public class Solution {
4
5     public static void main(String[] args) {
6         /* Enter your code here. Read input from S-
7         Scanner scn = new Scanner(System.in);
8         int x = scn.nextInt();
9         int y = scn.nextInt();
10        System.out.println(x+y);
11        System.out.println(x-y);
12    }
13 }
14 }
```



Area and Perimeter 5

Problem

Submissions

Leaderboard

Discussions

Take length and breadth of the rectangle as input. And print area of the rectangle in the first line and perimeter of the rectangle in the second line.

Input Format

In the first line, length of the rectangle is given as input. In the second line, breadth of the rectangle is given as input.

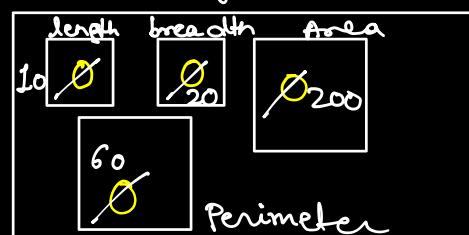
Integer

```
Scanner scn = new Scanner (System.in);
int length → scn.nextInt();
           breadth      );
int area = length * breadth;
int perimeter = 2*(length+breadth);
print(area);
print(perimeter);
```

```
ublic class Solution {

    public static void main(String[] args) {
        /* Enter your code here. Read input from STDIN.
        Scanner scn = new Scanner(System.in);
        int length = scn.nextInt(); → 10
        int breadth = scn.nextInt(); → 20
        int area = length * breadth; = 10 * 20 = 200
        int perimeter = 2 * (length + breadth);
        System.out.println(area);
        System.out.println(perimeter);
    }
}
```

Memory



Output

```
200
60
```