

Q1. OVERLOADING THE MAIN FUNCTION

1. Overload the main method by passing a single String.
2. Overload the main method by passing a two String.

Input Format

No console input.

Output Format

The first line of the output should display 'Hi'.

The second line of the output should display 'Overloaded: Hello World'.

The third line of the output should display 'Overloaded: Tom & Jerry'

Q2. METHOD OVERLOADING USING TYPE CONVERSION

Create a class named 'Main'. Define a method 'print'

1. Create an object obj.
2. Call method 'print' with one argument in an Integer type, Output should display given Integer.
3. Call method 'print' with one argument in a String type, Output should display given String.
4. Call method 'print' with one argument in a Boolean type, Output should display given Boolean.

Input Format

No console input.

Output Format

The first line of the output should display 35

The second line of the output should display 'Hello World'

The third line of the output should display 24.35

Q3. Write a program to illustrate dynamic polymorphism, create two classes Vehicle and Motorbike. Motorbike inherits the Vehicle

class.

Create a method move() in base class that takes a string as input and print them.

Override the method move() in derived class that also takes a string as input and prints them.

Input Format

Input two strings in separate line

Output Format

Displays the string after execution.

Q4. Create a parent class that consists of two methods m1 and m2.

m1 doesn't take any arguments and it just prints from parent.

m2 takes an integer value as parameter and prints the same.

Create a child class that extends parent class and override its methods.

m1 doesn't take any arguments and it just prints from child.

m2 takes an integer value as parameter and prints the same.

In the main class, create objects for the above classes and call the corresponding methods.

Input Format

The input consists of the integer value for both the classes separated by a space.

Output Format

The output displays the result. Refer sample output.

Q5. Function Overloading

An ice-cream vendor sells his ice-creams in cone(radius r and height h) and ball(radius r) shaped containers. However, he is unsure

of the quantity that can be filled in the two containers. You are required to write a program in java that prints the volume of the

containers given its respective dimensions as input. Your class must be named 'Icecream' which has two methods with same

name 'Quantity' each having the respective dimensions of the containers as the parameters.

Function Header:

```
public void Quantity(int r, int h)
```

```
public void Quantity(int r)
```

Input Format

If the quantity of the cone is to be calculated, the input must have the radius(r) and height(h) in the same line separated by a space.

For calculating the quantity of the ball, the input must have its radius(r).

Note: Input type should be integer.

Output Format

The output must display the volume of the container rounded off to two decimal places for which the dimensions are given.