Java Questions Document

Question 1: Variables and data types

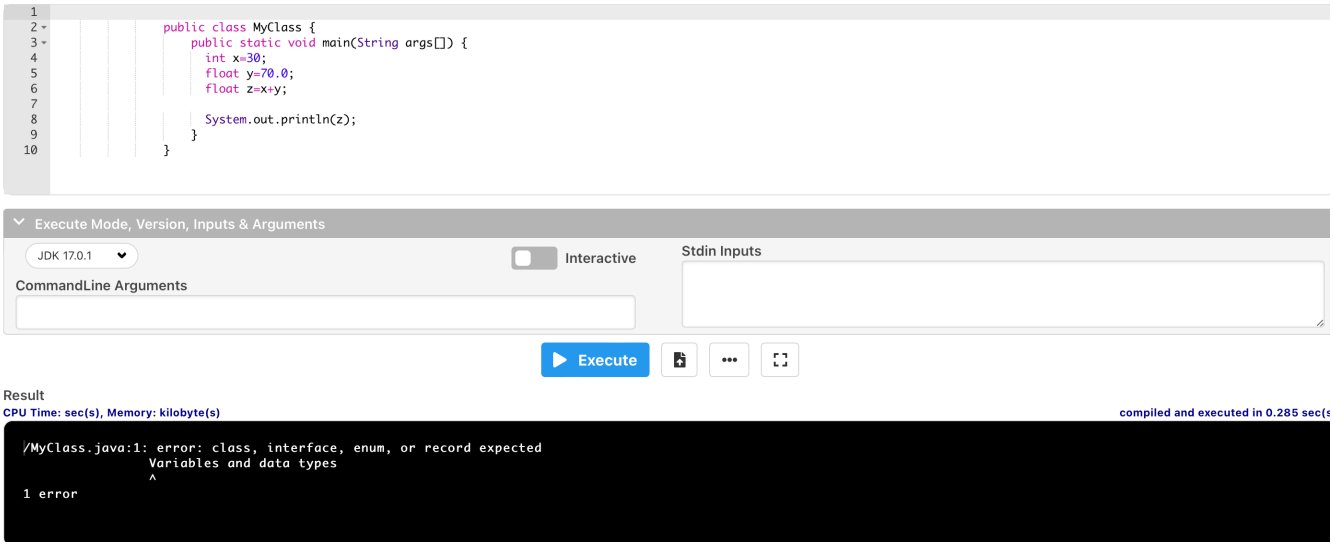
```
public class MyClass {
    public static void main(String args[]) {

    int x=30;
    float y=70.0;
    float z=x+y;

    System.out.println(z);
    }
}
```

ANSWERS TO THE QUESTION 1:
CUP A) 70
CUP B) 100
CUP C) ERROR
CUP D) 100.0

REASONING:
DIFFERENT VARIABLE TYPES CAUSE A ERROR AS Z IS A FLOAT VALUE WHILE X AND Y ARE A INTEGER VALUE.



Question 2: Conditional Question:

```
public class TaxiPrice {
	public static void main(String[] args) {

		double baseCost = 30.0;
		int numPassengers;

 Scanner scnr = new Scanner(System.in);

numPassengers = scnr.nextInt();

if (numPassengers <= 2) {
System.out.println(" Total cost: " + baseCost);
	}
else if( numPassengers >= 3 && numPassengers <10){

System.out.println("Total cost: " + (baseCost * 1.50));
	}
else{
System.out.println("Total cost: " + (baseCost * 2.0));
	}

	}
}
```

Q: If numPassengers = 10 what is the output

ANSWERS TO THE QUESTION 2:

ATTACK A) 60.0

ATTACK B) 12.0

ATTACK C) 45.0

ATTACK D) 37.0

REASONING:

10 TRIGGERS THE ELSE STATEMENT THAT CAUSES 30 * 2.0 = 60

```java
import java.util.Scanner;

public class MovieTicketPrices {
    public static void main(String[] args) {
    Scanner scnr = new Scanner(System.in);

        double baseCost = 30.0;
        int numPassengers;


numPassengers = scnr.nextInt();

if (numPassengers <= 2) {
System.out.println(" Total cost: " + baseCost);
    }
else if( numPassengers >= 3 && numPassengers <10){

System.out.println("Total cost: " + (baseCost * 1.50));
    }
else{
System.out.println("Total cost: " + (baseCost * 2.0));
    }

    }
}
```

Execute Mode, Version, Inputs & Arguments

JDK 17.0.1

Interactive

Stdin Inputs

10

CommandLine Arguments

Execute

Result

CPU Time: 0.19 sec(s), Memory: 38976 kilobyte(s)

compiled and executed in 0.704 sec(s)

```
Total cost: 60.0
```

Question 3: Loop Question:

```
import java.util.Scanner;
public class Salary {
        public static void main(String[] args) {
          Scanner scnr = new Scanner(System.in);
          double startingSalary;
          double salaryIncrease;
          double currentSalary;
          int i;

          System.out.print("Enter starting Salary: ");
          startingSalary = scnr.nextDouble();

          System.out.print("Enter salary increase rate:
");
          salaryIncrease = scnr.nextDouble();

          currentSalary = startingSalary;
          for (i = 0; i < 5; ++i) {
            System.out.println("$" + currentSalary);
            currentSalary = currentSalary *
salaryIncrease;
          }
        }
      }
```

Q: If Starting salary is 10000 and increase rate 2.5 what is the last two numbers outputted

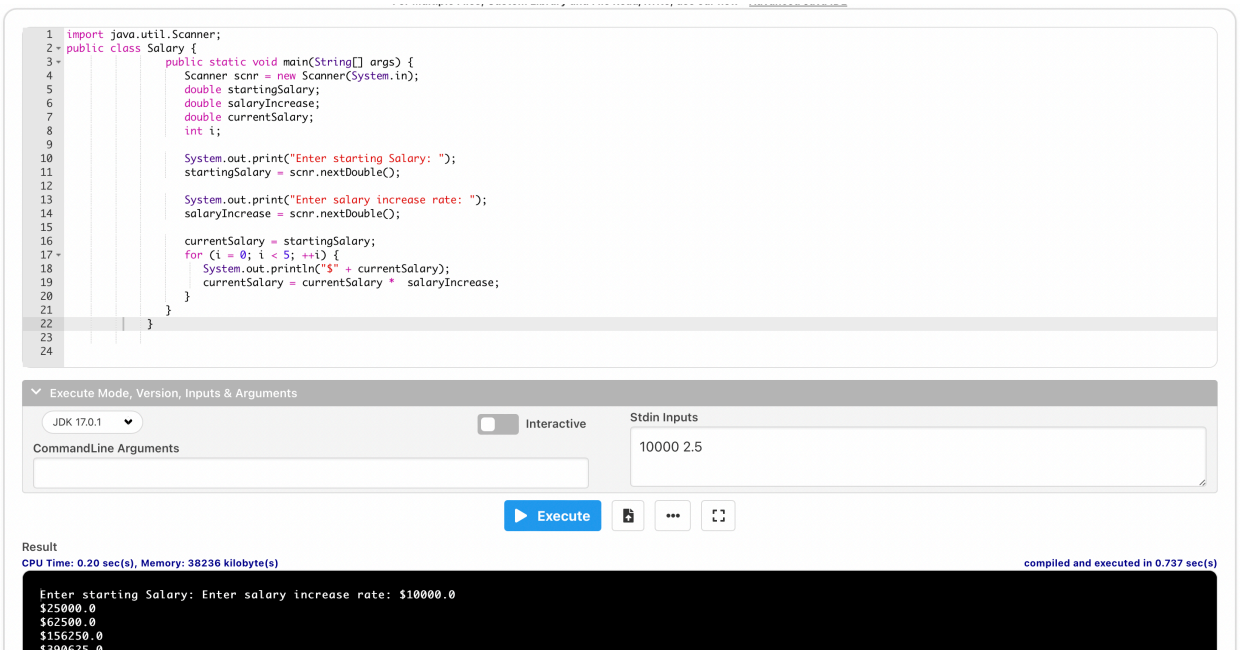
ANSWERS TO THE QUESTION :

ANSWER A) $156250.0 , $390625.0

ANSWER B) 100000 , 250000

ANSWER C) $25000.0 , $62500.0
ANSWER D) 20.0

REASONING: THE LOOP RUNS A TOTAL OF 5 TIMES DUE TO THE " I < 5" MAKING THE LAST TWO VALUES 156250.0 , $390625.0 100000 & 250000.



Question 4: Array Question

```
import java.util.Scanner;

        public class test {

          public static void main(String[] args) {
            final int NUM_VALS = 4;
            int[] listOne = new int[NUM_VALS];
            int[] listTwo = new int[NUM_VALS];
            int i;
            Scanner input = new Scanner(System.in);

            listOne[0] = input.nextInt();
            listOne[1] = input.nextInt();
            listOne[2] = input.nextInt();
            listOne[3] = input.nextInt();

            listTwo[0] = input.nextInt();
            listTwo[1] = input.nextInt();
            listTwo[2] = input.nextInt();
            listTwo[3] = input.nextInt();

            for(i=0;i<4;i++){
             System.out.print(listOne[i] * listTwo[i] + " ");
            }
            System.out.println();
          }
        }
            import java.util.Scanner;
```

Q: If the Input is 1, 5 ,10,15,2,4,6,8 What is the output?”

OPTION A) 2

OPTION B) 20
OPTION C) 60
OPTION D) 120

REASONING: NA