

Java Coding Test

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1. Write a java program to find largest of three numbers by getting input from user?

```
import java.util.Scanner;

public class largestNumber {
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter the 1st number: ");
    int num1 = sc.nextInt();
    System.out.println("Enter the 2nd number: ");
    int num2 = sc.nextInt();
    System.out.println("Enter the 3rd number: ");
    int num3 = sc.nextInt();

    if (num1 >= num2 && num1 >= num3) {
        System.out.println("The largest number is: " + num1);
    } else if (num2 >= num1 && num2 >= num3) {
        System.out.println("The largest numbr is: " + num2);
    } else {
        System.out.println("The largest numbr is: " + num3);
    }
    sc.close();
}
```

OUTPUT:

Enter the 1st number:

1

Enter the 2nd number:

3

Enter the 3rd number:

2

The largest numbr is: 3

2. Write a java program to convert temperature from Celsius to Fahrenheit.

```
import java.util.Scanner;

public class CelToFah {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter temperature in Celsius: ");

        double cel = sc.nextDouble();
        double fah = (cel * 9 / 5) + 32;
        System.out.println("the temperature in Fahrenheit: "+fah);
        sc.close();
    }
}
```

OUTPUT:

Enter temperature in Celsius: 10

the temperature in Fahrenheit: 50.0

3. Check the code: why the below code is throwing error?

```
short y=50;
y=y+100;
```

Ans,

Error message :- Type mismatch: cannot convert from int to short.

We can add a "short" for narrowing casting because the int value is bigger then the short value we need to conver the int 100 into short.

```
public class shortToInt {
    public static void main(String[] args) {
        short y = 50;
        y = (short)(y+ 100);
        System.out.println(y);
    }
}
```

OUTPUT:

150

4. Write a java program to get input from user, and find the number is even or odd?

Modulo operator % to check it is divisible by 2

```
import java.util.Scanner;

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

        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the any numbers: ");
        int num = sc.nextInt();

        if (num % 2 == 0) {
            System.out.println("you have entered the EVEN number.");
        } else {
            System.out.println("you have entered the ODD number");
        }
    }
}
```

OUTPUT:

Enter the any numbers:

4

you have entered the EVEN number.

5. Write a java program using “~” inverse operator?

```
public class inverseOpe {
    public static void main(String[] args) {
        //Write a java program using “~” inverse operator
        bitwise NOT operator.
        int num1 = 2;
        int num2 = ~ num1;
        System.out.println("NUmber One is: "+num1);
        System.out.println("NUmber two is: "+num2);
    }
}
```

OUTPUT:

NUmber One is: 2

NUmber two is: -3

6. Write a java program to create a simple calculator by getting input from user?

```
import java.util.Scanner;

public class Calculator {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter frist number: ");
        double num1 = sc.nextInt();

        System.out.print("Chose any one Operator(+,-,*,/) : ");
        char arithmatice = sc.next().charAt(0);

        System.out.print("Enter Second number: ");
        double num2 = sc.nextInt();

        double outPut;
        switch (arithmatice) {
            case '+':
                outPut = num1 + num2;
                break;

            case '-':
                outPut = num1 - num2;
                break;

            case '*':
                outPut = num1 * num2;
                break;

            case '/':
                outPut = num1 / num2;
                break;
            default:
                System.out.println("Invalide Symbal");
                return;
        }
        System.out.println("Result : " + outPut);
        sc.close();
    }
}
```

OUTPUT:

```
-----
Enter frist number: 5
Chose any one Operator(+,-,*,/) : *
Enter Second number: 2
Result : 10.0
```

7. Write a program to which finds the numbers are greater than the average of the mentioned array?

```
int array[] = {5, 20, 17, 34, 8, 15};

public class GreaterThenAvg {
    public static void main(String[] args) {
        int array[] = { 5, 20, 17, 34, 8, 15 };
        int value = 0;
        for (int num : array){
            value += num;
        }
        double avg = value/array.length;
        //double avg = value/6;
        System.out.println("The average of the mentioned array: "+avg);
    }
}
```

OUTPUT:

The average of the mentioned array: 16.0

8. Write a java program to check whether the given integer is multiples of “3”.

Modulo operator % to check it is multiples by 3

```
import java.util.Scanner;

public class MulOfThree {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter the number: ");
        int val = sc.nextInt();
        if (val % 3 == 0) {
            System.out.println(val + " -->It is multiples of 3.");
        } else {
            System.out.println(val + " -->It is not multiple of 3.");
        }
    }
}
```

OUTPUT:

Enter the number: 9

9 -->It is multiples of 3.

Enter the number: 5

5 -->It is not multiple of 3.

9. Check the output for the below code:

```
int x = 10, y = 15, z = 4;
int firstExpression = x - y/3 + z * 2 - 1;
int secondExpression = (x - y)/3 + ((z * 2) - 1);
```

```
public class CheckOutput {
    public static void main(String[] args) {
        int x = 10, y = 15, z = 4;
        int fristExpression = x - y / 3 + z * 2 - 1;
        int secondExpression = (x - y) / 3 + ((z * 2) - 1);
        System.out.println(fristExpression);
        System.out.println(secondExpression);
    }
}
```

OUTPUT:

Frist Expressionis :12
Second Expression is :6

10. Given Array:

```
int numbers[] = {34,56,12,22,67,2,5};
```

in the given array find the second largest element.

```
public class SecLarNum {
    public static void main(String[] args) {
        int numbers[] = { 34, 56, 12, 22, 67, 2, 5};
        int n = numbers.length;

        int largest = numbers[0];
        int secondLargest = numbers[0];

        for (int i = 1; i < n; ++i) {
            if (numbers[i] > largest) {
                secondLargest = largest;
                largest = numbers[i];
            }
            else if (numbers[i] > secondLargest && numbers[i] != largest)
            {
                secondLargest = numbers[i];
            }
        }
        System.out.println("The second greatest number is: "+secondLargest);
    }
}
```

```
}  
}
```

OUTPUT :

The second greatest number is: 56