

## FULL STACK DEVELOPMENT – WORKSHEET-A

Batch no – FS2308

**Ques 1 . Write a java program add two number,**

**Ans:-**

```
import java.util.Scanner;

public class sum {

    public static void main(String[] args){

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter two number);

        Int x = sc.nextInt();

        Int y = sc.nextInt();

        System.out.println(x+y);

    }

}
```

**Run the code =**

Enter two number

5

5

= 10

**Explanation:-** Add two number, first we take integers as input from user and store in integer variable int x and int y. then add both int x and int y “sum”. Then finally, print the sum of two given number.

**Ques 2. Write a java program check whether a number is Even or odd,**

**Ans:-**

```
import java.util.Scanner;

public class evenodd {

    public static void main(String[] args){

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter a number");

        Int x = sc.nextInt();

        If(x % 2 == 0){

            System.out.println(x+ "is even number");

        }

        else {

            System.out.println( x+ " is odd number");

        }

    }

}
```

**Run the code:-**

Enter a number

10

= 10 is even number

**Explanation:-** if the number is perfectly divisible by 2, suppose  $\text{number \% } 2 == 0$ , this means that number is even number otherwise odd number.

**Ques 3. Write a java program check if a given number is palindrome or not,**

**Ans:-**

```
public class palindrome{  
    public static void main(String[] args){  
        int num = 121;  
        int rev = 0;  
        int temp = num;  
  
        while(num>0){  
            rev = rev*10;  
            rev = rev+num%10;  
            num = num/10;  
        }  
        If(rev == temp){  
            System.out.println("This is palindrome");  
        }  
        else {  
            System.out.println("This is not palindrome");  
        }  
    }  
}
```

```
}
```

### Run the code:-

This is palindrome

### Explanation:- suppose

Num = 121

Rev = 0

Temp = 121

#### Step – 1 (while loop)

Rev = 0

Rev =  $0 + 1 = 1$

Num = 12

#### Step-2

Rev =  $1 \times 10 = 10$

Rev =  $10 + 2 = 12$

Num =  $12 / 10 = 1$

#### Step-3

Rev = 120

Rev =  $120 + 1 = 121$

Num = 0

#### Step-4

Num = 0 so zero can not be greater than zero , so while loop stop so step 4 does not happen. After the value num become zero so if the block is checking rev=temp, Then palindrome is printing.

**Ques 4. Write a java program to find the sum of n natural number,**

**Ans:-**

```
public class naturalnumber{  
    public static void main(String[] args){  
        int num = 10;  
        int sum = 0;  
        for(int i=1; i<=10; i++){  
            sum = sum+i;  
        }  
        System.out.println(sum);  
    }  
}
```

**Run the code:-**

55

**Explanation:-**

Natural number always start with positive number hence all positive number is natural number.

Ex- input = 10

Give input 10 then output should be

1+2+3+4+5+6+7+8+9+10 after add all then we get output = 55

**Ques 5. Write a java program to check Prime Number or not,**

**Ans:-**

```
import java.util.*;

public class primenumber{

    public static void main(String[] args){

        int num = 6;

        Boolean isprime = true;

        for(int i = 2; i<=num/2; i++){

            System.out.println(i);

            If(num % i ==0){

                isprime = false;

                break;

            }

        }

        If(isprime){

            System.out.println(num+" is a prime number");

        }

        else{

            System.out.println(num+" is not a prime number");

        }

    }

}
```

### Run the code:-

6 is not a prime number

### Explanation:-

Prime number is always divide by its self and one

We have input num = 6 is prime or not

As per definition

1,2,3,4,5.. increasing order

For loop

```
(i=2; i<=num/2 i++)
```

```
{ (num % == 0){
```

If we are going to divide by this number 1,2,3,4,5.. found like reminder is 0 then it is not prime

Declare Boolean isprime= true

6/1, 6/2=0, 6/3=0 6/4.....

Isprime=false

Break

After the check if condition apply

Then declare this is prime or not