FlipRobo Technologies – Internship

Worksheet – A

Ques 1. Write a java program Add two Numbers

Ans :

```
public class AddNumber {
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		System.out.println("Enter two numbers: ");
		int a = sc.nextInt();
		int b = sc.nextInt();
		int sum = a + b;
		System.out.println("Sum of "+ a + " and " + b + " is
"  + sum);
	}
}
```

Code explanation:

Here I have asked two inputs from user using scanner class then declared another variable sum to add two inputs. Added those two numbers to sum and printed the output sum.

Ques 2. Write a java program Check Whether a Number is Even or Odd.
Ans:

```
public class EvenOrOdd {

	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		System.out.println("Enter a number: ");
		int a = sc.nextInt();
		if(a%2==0) {
			System.out.println("Number is Even");
		}
		else {
			System.out.println("Number is Odd");
		}
	}
}
```

Code explanation:

In this code I took one input from user and checked if the number is divisible by 2 using if statement. If the remainder is zero then the number is even otherwise its odd.

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) {
		Scanner sc = new Scanner(System.in);
		System.out.println("Enter a number: ");
		int a = sc.nextInt();
		int temp = a;
		int digit, sum = 0;
		while (a > 0) {
			digit = a % 10;
			sum = (sum * 10) + digit;
			a = a / 10;
		}
		if(sum==temp) {
			System.out.println("Number is palindrome");
		}
		else
			System.out.println("Number is not a
palindrome");
	}
}
```

Code explanation:

In this code I took one input “a” from user. Declared a temporary variable temp and assigned “a” to it. Declared another variables digit and sum and initialised sum to zero. Reversed the number using while loop given a condition a>0, inside while loop. Extracted last digit by doing a%10 and assigning modulus to digit digit. Then added the digit to sum by multiplying 10 by sum to shift number to next place.
Then the inputted number “a” is updated by removing the last digit by a/10; this process goes until the if condition becomes false.(When a becomes 0)
Then it will check whether the temp and sum are equal using if statement. If its equal then the number is palindrome otherwise it’s not a palindrome.

Ques 4. Write a java program to find the sum of n natural numbers.
Ans:

```
public class SumOfNaturalNumbers {
	public static void main(String[] args) {
		int sum =0;
		Scanner sc = new Scanner(System.in);
		System.out.println("Enter the limit: ");
		int n = sc.nextInt();
		for(int i=1;i<=n ;i++) {
			sum = sum+i;
		}
		System.out.println("Sum of " + n + " natural numbers
is: " + sum);

	}
}
```

Code explanation:

In this code I took one input from user as the limit to find the sum of natural numbers. Declared and assigned a variable sum to zero. Iterated the numbers from one (as natural number starts from 1), till the limit using for loop. Then added each iteration to sum. Printed out the sum at last.

Ques 5. Write a java program to Check Prime Number or not

Ans:

```
public class PrimeOrNot {

	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		System.out.println("Enter a number: ");
		int n = sc.nextInt();
		int flag =0;
		for(int i=2; i<n; i++) {
			if(n%i==0) {
				flag=1;
				break;
			}
		}
		if(n==0 || n==1) {
			System.out.println("Number is niether prime nor
composite");
		}
		else if(flag==0) {
			System.out.println("Number is prime");
		}
		else {
			System.out.println("Number is not prime");
```

```
                }
        }
}
```

Code explanation:

In this code I took one input “n” from user. Declared and assigned a variable flag to zero. Using for loop iterated from 2 till n (since all numbers are divisible by 0 and 1). Inside for loop checks if the number is divisible by each iterated value. If n is divisible any iteration i, then it changes the flag value to one and breaks the statement. If the number is one or zero it prints, “number is neither prime nor composite” and if the flag is equal to zero then it prints “number is prime” otherwise it prints “number is not prime”.