Assignment No. 2 (Week - 2)

Q.1] Write a program to count word frequencies in a given text

```
import java.io.*;

class FrequencyCount
{
    public static void main(String args[]) throws IOException
    {
        BufferedReader br=new BufferedReader(new
InputStreamReader(System.in));
        System.out.println("Enter the String: ");
        String s=br.readLine();
        System.out.println("Enter substring: ");
        String sub=br.readLine();
        int ind,count=0;
        for(int i=0; i+sub.length()<=s.length(); i++)
        {
            ind=s.indexOf(sub,i);
            if(ind>=0)
            {
                count++;
                i=ind;
                ind=-1;
            }
        }
        System.out.println("Occurence of '"+sub+"' in String is "+count);

    }
}
```

Output:

```
Enter the String:
language is not just word. language is the only homeland.
Enter substring:
language
Occurence of 'language' in String is 2
```

Q.2] Palindrome Checker

Write a program that checks if a given word is palindrome.

```java
import java.util.*;
public class Palindrome
{
    public static void main(String args[])
    {
        String a, b = "";
        Scanner s = new Scanner(System.in);
        System.out.print("Enter a string:");
        a = s.nextLine();
        int n = a.length();
        for(int i = n - 1; i >= 0; i--)
        {
            b = b + a.charAt(i);
        }
        if(a.equalsIgnoreCase(b))
        {
            System.out.println(a+ " is a palindrome.");
        }
        else
        {
            System.out.println(a+ " is not a palindrome.");
        }
    }
}
```

Output:

```
Enter a string:madam
madam is a palindrome.
PS C:\Users\HP\Desktop\B.Tech\java(internship)\Week2>
```

Q.3] List Manipulation

Create a list of numbers, then write a program that prints the square of each number in the list.

```java
import java.util.*;
public class SquareListItemsExample {
    public static void main(String[] args) {

        List<Integer> numbers = new ArrayList<>();
        numbers.add(1);
        numbers.add(2);
        numbers.add(3);
        numbers.add(4);
        numbers.add(5);

        for (int i = 0; i < numbers.size(); i++) {
            int squared = numbers.get(i) * numbers.get(i);
            numbers.set(i, squared);
        }

        System.out.println("Squared list: " + numbers);
    }
}
```

Output:

```
Squared list: [1, 4, 9, 16, 25]
```