Implement all question in Java and Generate Class Diagram (Lab-7 Home Work).

Q1. Drawing Application

You are creating a drawing application and currently have only 1 tool - a pencil. You want to add brush and spray to the drawing toolbar.
Write the program, declares an **IDraw** interface with the **StartDraw()** method, and class **Draw**, which performs pencil drawing by implementing the IDraw interface. It outputs "Using pencil".
Complete the given Brush and Spray classes by
- inheriting them from class Draw
- implementing the StartDraw() method for each tool, in order to output
"Using brush" for Brush, or
"Using spray" for Spray.

The Draw objects and their method calls are provided in Main().

Don't forget about the **override** keyword.

Q2. Bowling Game

You are creating a bowling game!
The given code declares a **Bowling** class with its constructor and **addPlayer**() method.
Each player of the game has a name and points, and are stored in the players **HashMap**.
The code in main takes 3 players data as input and adds them to the game.
You need to add a **getWinner**() method to the class, which calculates and outputs the name of the player with the maximum points.

Sample Input:
Dave 42
Amy 103
Rob 64
Sample Output:
Amy

You need to iterate through the HashMap to find the element with the maximum points and output its corresponding key.

```java
import java.util.*;
public class Bowling {
    HashMap<String, Integer> players;
    Bowling() {
        players = new HashMap<String, Integer>();
    }
    public void addPlayer(String name, int p) {
        players.put(name, p);
    }
    //your code goes here
}
public class Program {
    public static void main(String[ ] args) {
        Bowling game = new Bowling();
        Scanner sc = new Scanner(System.in);

        for(int i=0;i<3;i++) {
            String input = sc.nextLine();
            String[] values = input.split(" ");
            String name = values[0];
            int points = Integer.parseInt(values[1]);
            game.addPlayer(name, points);
        }
        game.getWinner();
    }
}
```

Q3. LinkedLists

The program you are given declares LinkedList "words".
Write a program to take words as input and add them to LinkedList untill its size isn't equal to 5,
then output only those words whose length is more than 4 characters.

Sample Input
Java
practice
is
makes
perfect

Sample Output
practice
makes
perfect

length() method returns the number of characters in a string.

Instructor: Engr. Khuram Shahzad