

Advance Programing Assignment 1

Zip the assignment with your name and mat number and submit it on slack.

Deadline 6th March 2024

1. Given a string `s` , and two indices, **begin** and **end** , print a substring consisting of all characters in the inclusive range from **begin** to **end -1** .

```
1 public class Solution {
2
3     public static void main(String[] args) {
4         Scanner in = new Scanner(System.in);
5         // your implementaion should go here
6
7     }
8 }
```

2. A palindrome is a word, phrase, number, or other sequence of characters which reads the same backward or forward. Given a string , print `Yes` if it is a palindrome, print `No` otherwise.
3. Consider the following implementation of a class `Square`:

What are the errors and how to fix it?

```
1 public class Square{
2     private int sideLength;
3     private int area;
4     public Square(int initialLength){
5         sideLength = initialLength;
6         area = sideLength * sideLength;
7     }
8     public int getArea() {
9         return area;
10    }
11    public void grow() {
12        sideLength = 2 * sideLength;
```

```
13  }  
14  }  
15  
16
```

4. Write programs with loops that compute
 - a. The sum of all even numbers between 2 and 100 (inclusive).
 - b. The sum of all squares between 1 and 100 (inclusive)

5. Write a program that reads a word and prints each character of the word on a separate line. For example, if the user provides the input "Harry", the program prints
H

a

r

r

y