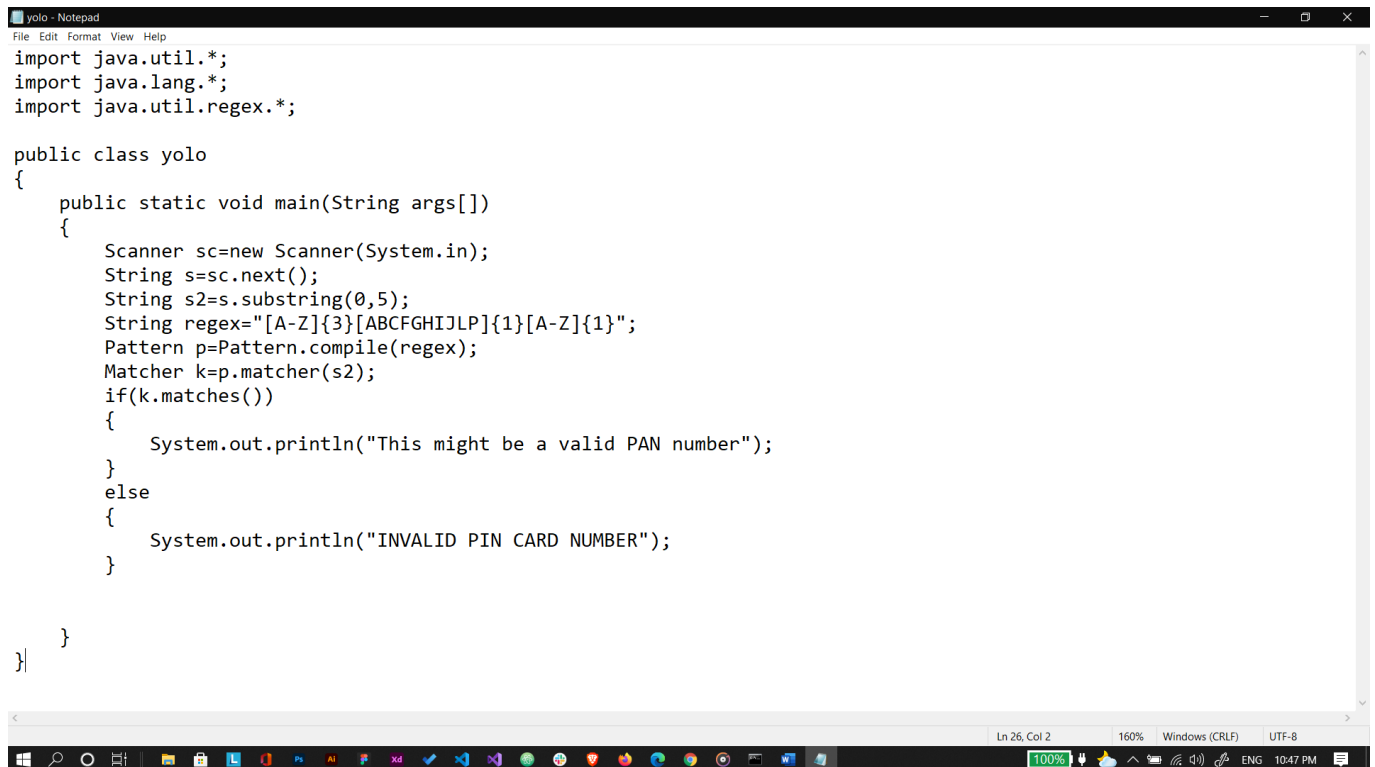Sharadindu Adhikari
19BCE2105

PAN is a ten -digit unique alphanumeric number issued by the Income Tax Department of India. The structure of the first five characters of PAN, the first three characters represent the alphabetic series running from AAA to ZZZ and the fourth character of PAN represents the status of the PAN holder it will contain only "A", "B", "C", "F", "G", "H", "I", "J", "L" & "P". Fifth character of PAN represents the first character of the PAN holder's last name/surname in case of an individual (i.e. the fifth character can be any valid alphabet from A to Z). In case of non -individual PAN holder's fifth character represents the first character of PAN holder's name. Get the input from the user, if all the cases are valid for PAN number's first five values then print "This might be valid PAN number" otherwise throw appropriate user defined exceptions (alphabetic series, status, etc.)
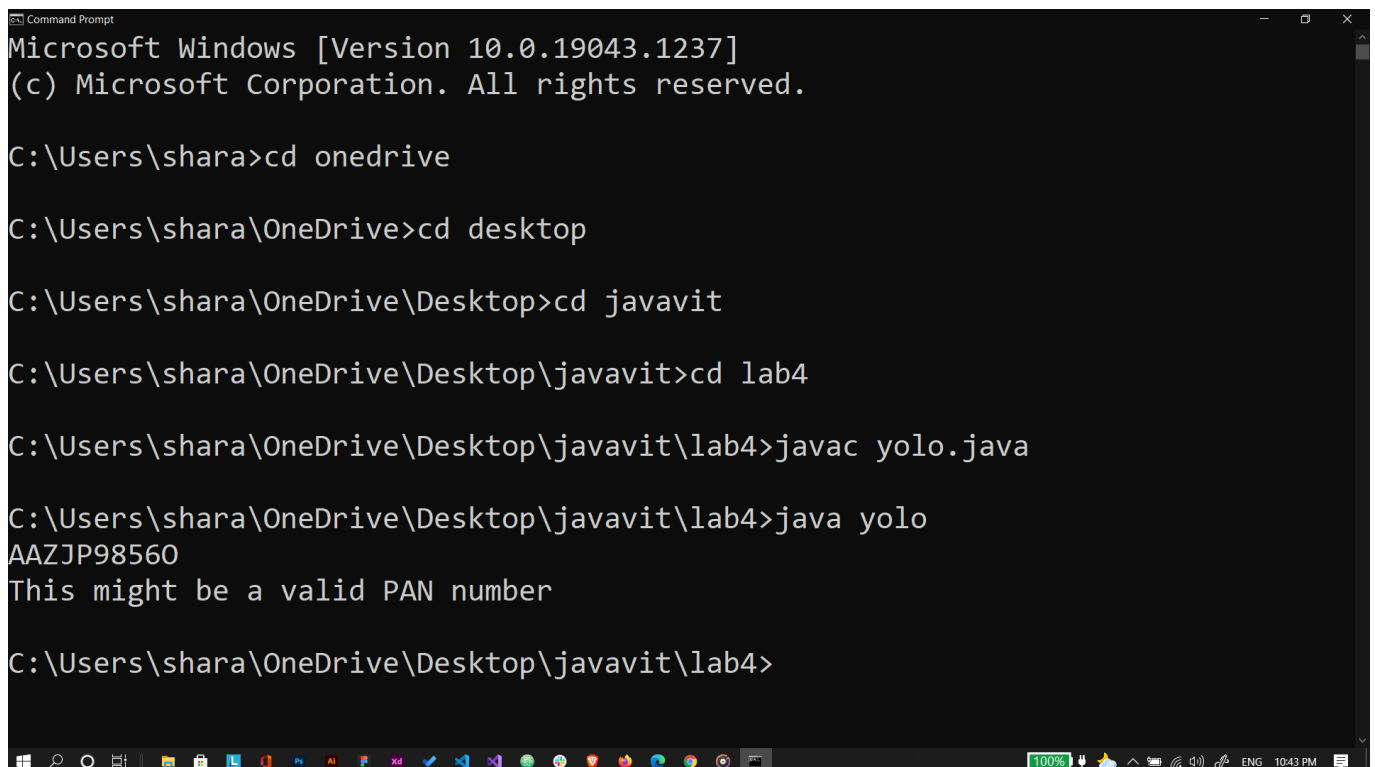
Solution:

```java
import java.util.*;
import java.lang.*;
import java.util.regex.*;

public class yolo
{
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);
        String s=sc.next();
        String s2=s.substring(0,5);
        String regex="[A-Z]{3}[ABCFGHIJLP]{1}[A-Z]{1}";
        Pattern p=Pattern.compile(regex);
        Matcher k=p.matcher(s2);
        if(k.matches())
        {
            System.out.println("This might be a valid PAN number");
        }
        else
        {
            System.out.println("INVALID PIN CARD NUMBER");
        }


    }
}
```

sharadindu.adhikari2019@vitstudent.ac.in

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    }
}
```

```
Microsoft Windows [Version 10.0.19043.1237]
(c) Microsoft Corporation. All rights reserved.

C:\Users\shara>cd onedrive

C:\Users\shara\OneDrive>cd desktop

C:\Users\shara\OneDrive\Desktop>cd javavit

C:\Users\shara\OneDrive\Desktop\javavit>cd lab4

C:\Users\shara\OneDrive\Desktop\javavit\lab4>javac yolo.java

C:\Users\shara\OneDrive\Desktop\javavit\lab4>java yolo
AAZJP9856O
This might be a valid PAN number

C:\Users\shara\OneDrive\Desktop\javavit\lab4>
```