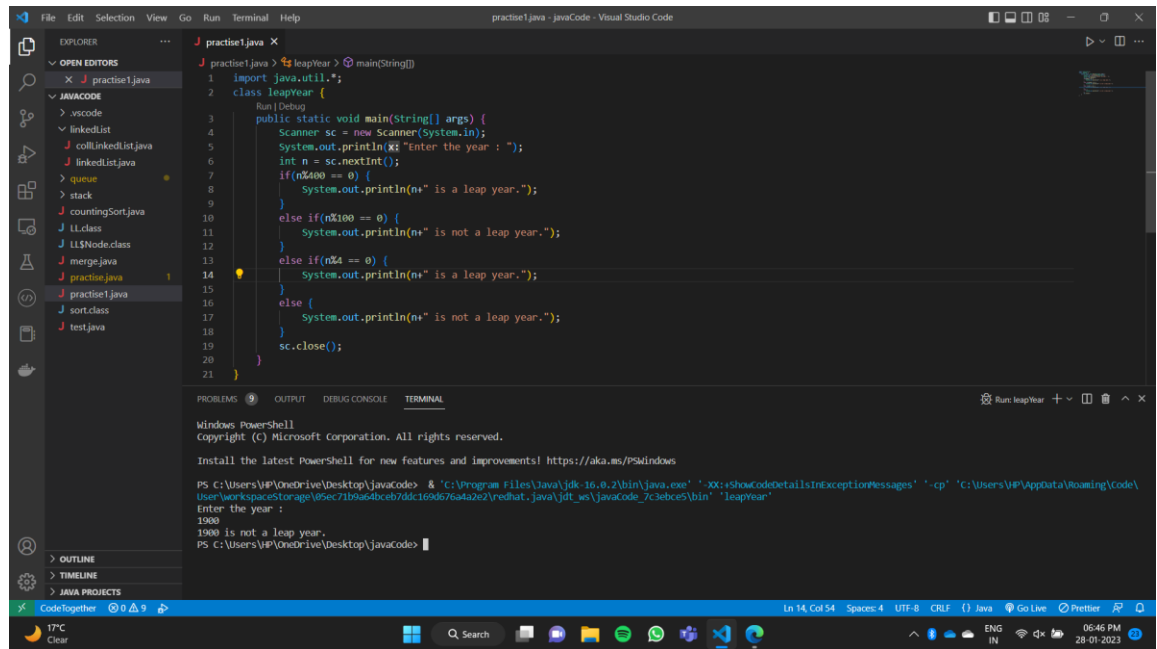


Assignment1

- 1) Check if a year is leap year or not.



```
practise1.java - javaCode - Visual Studio Code
1 import java.util.*;
2 class leapYear {
3     public static void main(String[] args) {
4         Scanner sc = new Scanner(System.in);
5         System.out.println("Enter the year : ");
6         int n = sc.nextInt();
7         if(n%400 == 0) {
8             System.out.println(n+" is a leap year.");
9         }
10        else if(n%100 == 0) {
11            System.out.println(n+" is not a leap year.");
12        }
13        else if(n%4 == 0) {
14            System.out.println(n+" is a leap year.");
15        }
16        else {
17            System.out.println(n+" is not a leap year.");
18        }
19        sc.close();
20    }
21 }
```

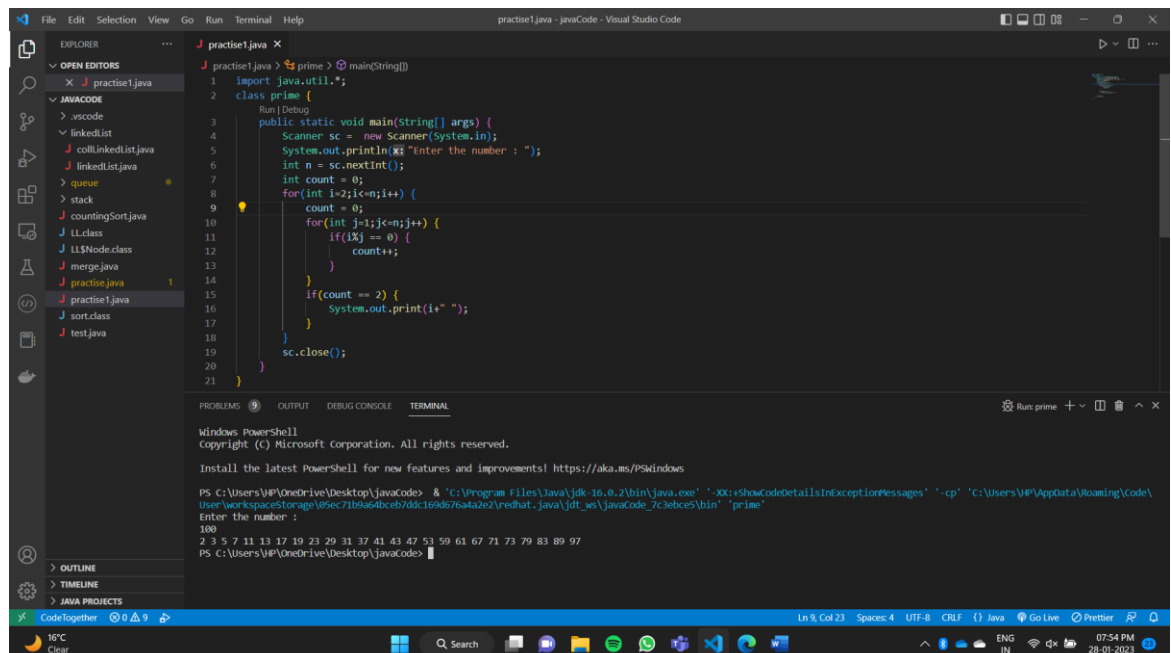
Windows PowerShell
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Install the latest Powershell for new features and improvements! <https://aka.ms/PSWindows>

PS C:\Users\VP\OneDrive\Desktop\javaCode> & "C:\Program Files\Java\jdk-16.0.2\bin\java.exe" "-XX:+ShowCodeDetailsInExceptionMessages" "-cp" "C:\Users\VP\AppData\Roaming\Code\User\workspaceStorage\05ec71b9a64bceb7ddc169d676a4a2e2\redhat.java\jdk_ws\javaCode_7c3ebce5\bin" "leapYear"

Enter the year :
1900
1900 is not a leap year.
PS C:\Users\VP\OneDrive\Desktop\javaCode>

- 2) Print all prime numbers in a given range. Range will be taken from user input.



```
practise1.java - javaCode - Visual Studio Code
1 import java.util.*;
2 class prime {
3     public static void main(String[] args) {
4         Scanner sc = new Scanner(System.in);
5         System.out.println("Enter the number : ");
6         int n = sc.nextInt();
7         int count = 0;
8         for(int i=2; i<=n; i++) {
9             count = 0;
10            for(int j=1; j<=n; j++) {
11                if(i%j == 0) {
12                    count++;
13                }
14            }
15            if(count == 2) {
16                System.out.print(i+" ");
17            }
18        }
19        sc.close();
20    }
21 }
```

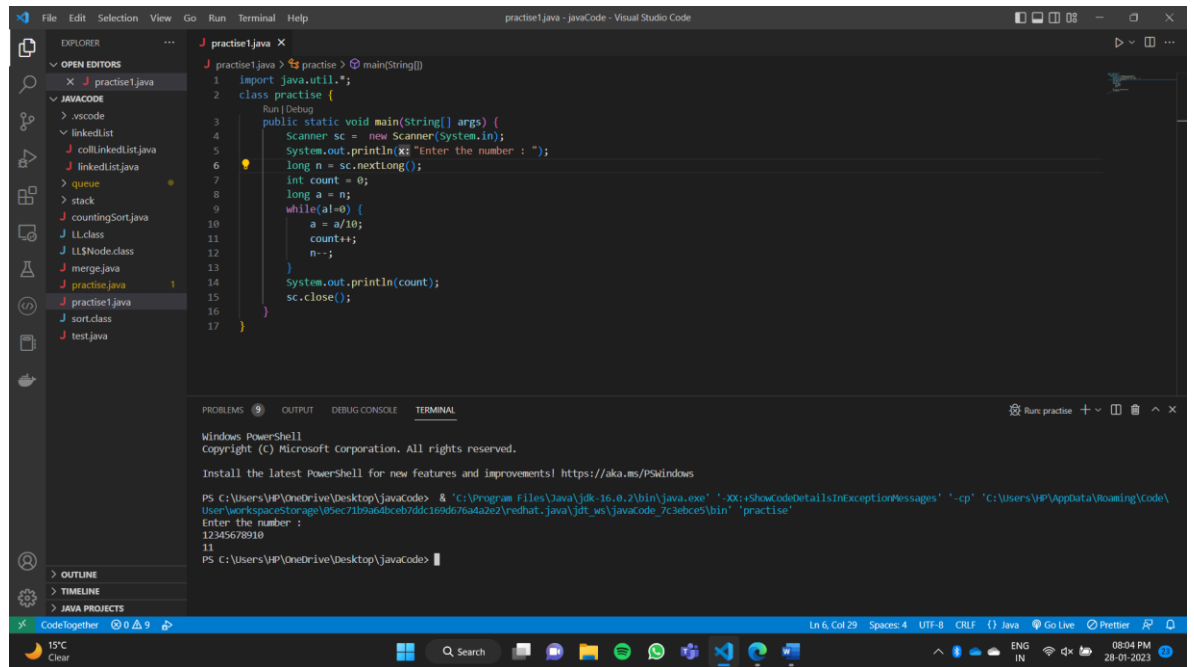
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PS C:\Users\VP\OneDrive\Desktop\javaCode> & "C:\Program Files\Java\jdk-16.0.2\bin\java.exe" "-XX:+ShowCodeDetailsInExceptionMessages" "-cp" "C:\Users\VP\AppData\Roaming\Code\User\workspaceStorage\05ec71b9a64bceb7ddc169d676a4a2e2\redhat.java\jdk_ws\javaCode_7c3ebce5\bin" "prime"

Enter the number :
100
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97
PS C:\Users\VP\OneDrive\Desktop\javaCode>

3) Count number of digits in a number.

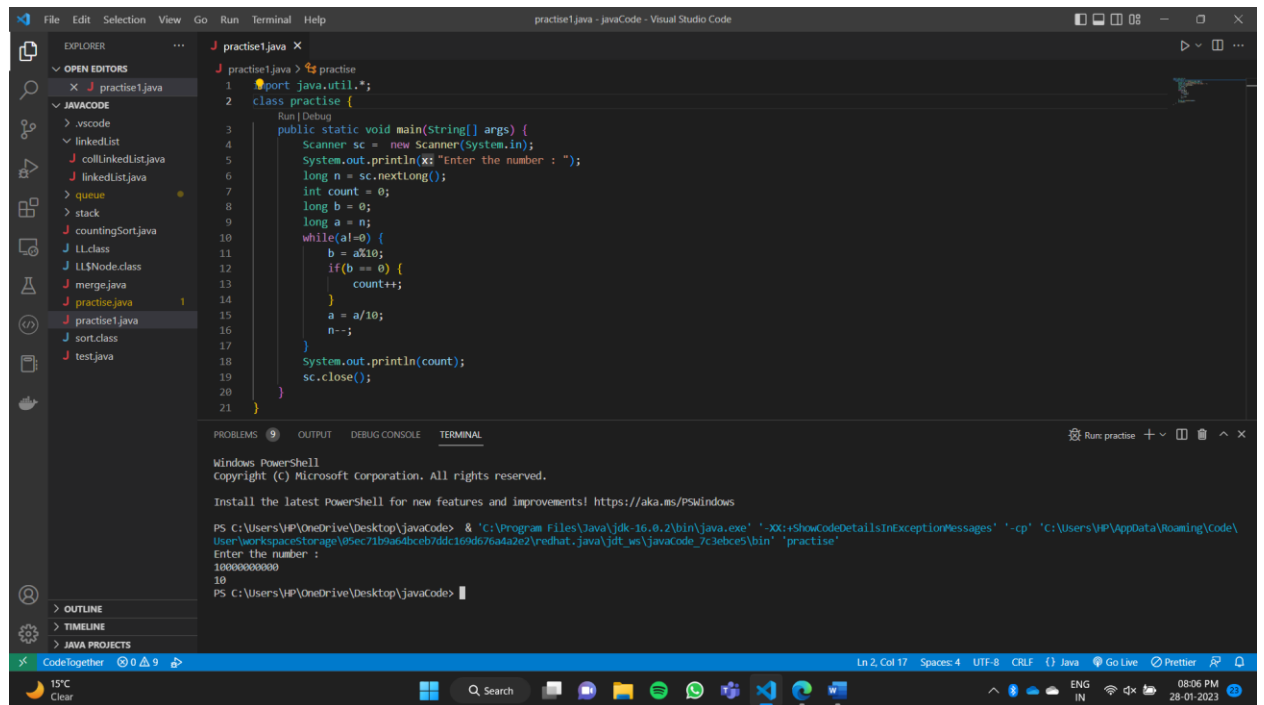


```
practise1.java X
practise1.java > practise > main(String[])
1 import java.util.*;
2 class practise {
3     public static void main(String[] args) {
4         Scanner sc = new Scanner(System.in);
5         System.out.println("Enter the number : ");
6         long n = sc.nextLong();
7         int count = 0;
8         long a = n;
9         while(a!=0) {
10             a = a/10;
11             count++;
12             n--;
13         }
14         System.out.println(count);
15         sc.close();
16     }
17 }
```

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```
PS C:\Users\VP\OneDrive\Desktop\javaCode> & "C:\Program Files\Java\jdk-16.0.2\bin\java.exe" "-Xt:ShowCodeDetailsInExceptionMessages" "-cp" "C:\Users\VP\AppData\Roaming\Code\
User\workspacestorage\05ec71b9a6d4ceb7ddc169d676a4a2e2\redhat-java\jdk_ws\javaCode_7c3ebce5\bin" "practise"
Enter the number :
12345678910
11
PS C:\Users\VP\OneDrive\Desktop\javaCode>
```

4) Count number of zeros in a digit.



```
practise1.java X
practise1.java > practise
1 import java.util.*;
2 class practise {
3     public static void main(String[] args) {
4         Scanner sc = new Scanner(System.in);
5         System.out.println("Enter the number : ");
6         long n = sc.nextLong();
7         long count = 0;
8         long b = 0;
9         long a = n;
10        while(a!=0) {
11            b = a%10;
12            if(b == 0) {
13                count++;
14            }
15            a = a/10;
16            n--;
17        }
18        System.out.println(count);
19        sc.close();
20    }
21 }
```

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```
PS C:\Users\VP\OneDrive\Desktop\javaCode> & "C:\Program Files\Java\jdk-16.0.2\bin\java.exe" "-Xt:ShowCodeDetailsInExceptionMessages" "-cp" "C:\Users\VP\AppData\Roaming\Code\
User\workspacestorage\05ec71b9a6d4ceb7ddc169d676a4a2e2\redhat-java\jdk_ws\javaCode_7c3ebce5\bin" "practise"
Enter the number :
10000000000
10
PS C:\Users\VP\OneDrive\Desktop\javaCode>
```