

CDAC Hyderabad

PG-DAC March 2023

OOPs With Java Assignment 3.

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Q1)

The screenshot shows a Sublime Text editor window titled "C:\Users\nikhi\Documents\Assignment 3\Absolute.java (Documents) - Sublime Text (UNREGISTERED)". The editor displays a Java program named "Absolute.java". The code is as follows:

```
1 import java.io.*;
2 public class Absolute{
3
4     public static void main(String[] args) {
5
6         Console cs = System.console();
7         System.out.println("Enter Number :");
8         int c = Integer.parseInt(cs.readLine());
9
10        if(c>0){
11
12            System.out.println(c+ " is Positive number ");
13        }else
14        {
15            System.out.println(c + " is Negative number ");
16        }
17    }
18 }
19
20
21
22
23
```

Below the editor, a Windows Command Prompt window is open, showing the execution of the program. The prompt displays the following output:

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22000.1696]
(c) Microsoft Corporation. All rights reserved.

C:\Users\nikhi\Documents\Assignment 3>java Absolute.java
Enter Number :
-23
-23 is Negative number

C:\Users\nikhi\Documents\Assignment 3>java Absolute.java
Enter Number :
23
23 is Positive number

C:\Users\nikhi\Documents\Assignment 3>
```

The Windows taskbar at the bottom shows the system clock as 00:32 on 03-04-2023, and the language is set to ENG IN.

Q2)

```
import java.io.*;

public class AgeGroup{

    public static void main(String[] args) {

        Console cs = System.console();

        System.out.println("Enter Your Age :");
        int age= Integer.parseInt(cs.readLine());

        if(age<0){

            System.out.println(" Not born yet.....!!!!!!");

        }else{

            if(age<=3){
                System.out.println("Toddlers");

            }else if(age<=8){

                System.out.println("Kids");

            }else if(age<=12){

                System.out.println("Child");

            }

        }

    }

}
```

```
}else if(age<=18){

    System.out.println("Teens");

}

}else if(age<=40){

    System.out.println("Adults");

}

}else if(age<=60){

    System.out.println("Matured Adults");
}else if(age<=75){

    System.out.println("Seniors ");

}

}else if(age>76){

    System.out.println("Super Seniors");
}

}

    }

}
```

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 - Assignment 1
 - Assignment 2
 - Assignment 3
 - Absolute.java
 - AgeGroup.java
 - Coza.java
 - PrimeNo.java
 - Trangle.java
 - ZodiacSign.java
 - Assignment 4
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```
1  import java.io.*;
2  public class AgeGroup{
3
4      public static void main(String[] args) {
5
6          Console cs = System.console();
7          System.out.println("Enter Your Age :");
8          int age= Integer.parseInt(cs.readLine());
9
10         if(age<0){
11
12             System.out.println(" Not born yet.....!!!!!!");
13
14         }else{
15
16             if(age<=3){
17                 System.out.println("Toddlers");
18
19             }else if(age<=8){
20
21                 System.out.println("Kids");
22
23             }else if(age<=12){
24
25                 System.out.println("Child");
26
27             }else if(age<=18){
28
29                 System.out.println("Teens");
30
31             }else if(age<=40){
32
33                 System.out.println("Adults");
34
35             }else if(age<=60){
36
37                 System.out.println("Matured Adults");
38             }else if(age<=75){
```

C:\ Select C:\Windows\System32\cmd.exe

```
C:\Users\nikhi\Documents\Assignment 3>java AgeGroup.java
Enter Your Age :
23
Adults

C:\Users\nikhi\Documents\Assignment 3>java AgeGroup.java
Enter Your Age :
121
Super Seniors

C:\Users\nikhi\Documents\Assignment 3>java AgeGroup.java
Enter Your Age :
12
Child

C:\Users\nikhi\Documents\Assignment 3>_
```

Line 15, Column 1

Spaces: 4

Java



Q3)

```
import java.io.*;
```

```
public class Coza{
```

```
    public static void main(String[] args) {
```

```
        int n =1;
```

```
        for (int i =1;i<=10 ;i++ ) {
```

```
            for (int j =1;j<=11 ;j++ ) {
```

```
                if((n%3==0)&&(n%5==0)&&(n%7==0)){
```

```
                    System.out.print(" CozaLozaWoza ");
```

```
                }else if((n%3==0)&&(n%5==0)){
```

```
                    System.out.print(" CozaLoza ");
```

```
                }else if(n%3==0){
```

```
                    System.out.print(" Coza ");
```

```
                }else if(n%5==0){
```

```
                    System.out.print(" Loza ");
```

```

    }else if(n%7==0){

        System.out.print(" Woza ");

    }else{

        System.out.print(n+" ");

    }

    n++;

}

System.out.println();

}

}

```

C:\Users\nikhi\Documents\Assignment 3\Coza.java (Documents) - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

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```

1  import java.io.*;
2
3  public class Coza{
4
5      public static void main(String[] args) {
6
7          int n =1;
8
9          for (int i =1;i<=10 ;i++ ) {
10
11              for (int j =1;j<=11 ;j++ ) {
12
13                  if((n%3==0)&&(n%5==0)&&(n%7==0)){
14                      System.out.print(" CozaLozaWoza ");
15                  }else if((n%3==0)&&(n%5==0)){
16                      System.out.print(" CozaLoza ");
17                  }else if(n%3==0){
18                      System.out.print(" Coza ");
19                  }else if(n%5==0){
20                      System.out.print(" Loza ");
21                  }else if(n%7==0){
22                      System.out.print(" Woza ");
23                  }else{
24                      System.out.print(n+" ");
25                  }
26              }
27          }
28      }
29  }
30
31
32
33
34
35
36
37
38

```

C:\Windows\System32\cmd.exe

```

C:\Users\nikhi\Documents\Assignment 3>java Coza.java
1 2 Coza 4 Loza Coza Woza 8 Coza Loza 11
Coza 13 Woza CozaLoza 16 17 Coza 19 Loza Coza 22
23 Coza Loza 26 Coza Woza 29 CozaLoza 31 32 Coza
34 Loza Coza 37 38 Coza Loza 41 Coza 43 44
CozaLoza 46 47 Coza Woza Loza Coza 52 53 Coza Loza
Woza Coza 58 59 CozaLoza 61 62 Coza 64 Loza Coza
67 68 Coza Loza 71 Coza 73 74 CozaLoza 76 Woza
Coza 79 Loza Coza 82 83 Coza Loza 86 Coza 88
89 CozaLoza Woza 92 Coza 94 Loza Coza 97 Woza Coza
Loza 101 Coza 103 104 CozaLozaWoza 106 107 Coza 109 Loza

```

C:\Users\nikhi\Documents\Assignment 3>

Line 35, Column 1

Tab Size: 4 Java

00:33 03-04-2023

Q4)

C:\Users\nikhi\Documents\Assignment 3\PrimeNo.java (Documents) - Sublime Text (UNREGISTERED)

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```
1 import java.io.*;
2 public class PrimeNo{
3
4     public static void main(String[] args) {
5
6         Console cs = System.console();
7         System.out.println("Enter a number :");
8         int num= Integer.parseInt(cs.readLine());
9
10        for (int i = 2;i<=Math.sqrt(num) ;i++) {
11
12            if(num%i==0){
13
14                System.out.println(num+ " is not Prime number ");
15                break;
16            }else
17
18                System.out.println(num+ " is Prime Number ");
19                break;
20
21        }
22    }
23 }
24 }
25 }
```

C:\Windows\System32\cmd.exe

```
C:\Users\nikhi\Documents\Assignment 3>java PrimeNo.java
Enter a number :
345
345 is Prime Number

C:\Users\nikhi\Documents\Assignment 3>java PrimeNo.java
Enter a number :
12
12 is not Prime number

C:\Users\nikhi\Documents\Assignment 3>java PrimeNo.java
Enter a number :
144
144 is not Prime number

C:\Users\nikhi\Documents\Assignment 3>java PrimeNo.java
Enter a number :
17
17 is Prime Number

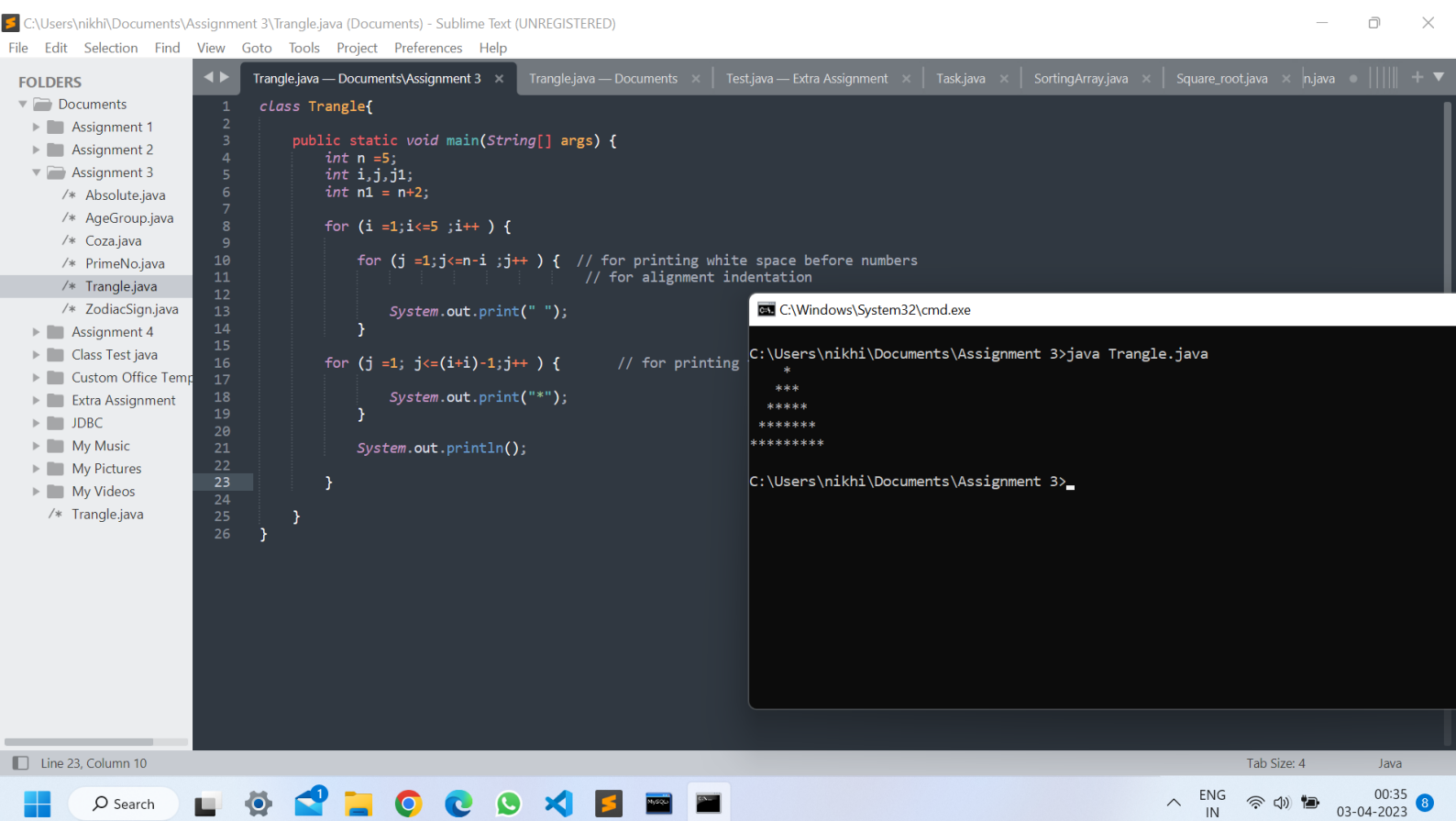
C:\Users\nikhi\Documents\Assignment 3>
```

Line 1, Column 1

Tab Size: 4 Java

00:35 03-04-2023

Q5)



Q6)

```
import java.io.*;

public class ZodiacSign{

    public static void main(String[] args) {

        Console cs = System.console();

        System.out.println("Enter month :");

        int month= Integer.parseInt(cs.readLine());

        System.out.println("Enter day :");

        int day= Integer.parseInt(cs.readLine());

        String arr[]=
{"Aquarious","Pisces","Aries","Taurus","Gemini","Cancer","Leo","Virgo","Libra","Scorpio","Sagittariu
s","Capricorn"};

        if(((day<32&&day>=20 )&& month==1 ) || (month ==2 && (day<19&&day>=1))) {

            System.out.println(arr[0]);

        }

        else if(((day<29&&day>=19) &&month ==2) || ((day<21&&day>=1) && month ==3)){

            System.out.println(arr[1]);
```

```
}else if(((day<32&&day>=21 )&& month ==3 ) || ((day<20&&day>=1 )&&month==4)){
```

```
System.out.println(arr[2]);
```

```
}else if(((day<31&&day>=20) && month ==4 ) || ((day<21&&day>=1 )&& month==5)){
```

```
System.out.println(arr[3]);
```

```
}else if(((day<32&&day>=21 )&&month==5) || ((day<21&&day>=1 )&& month==6)){
```

```
System.out.println(arr[4]);
```

```
}else if(((day<31&&day>=21)&&month==6) || ((day<23&&day>=1) && month==7)){
```

```
System.out.println(arr[5]);
```

```
}else if(((day<32&&day>=23 )&&month==7) || ((day<23&&day>=1) && month==8)){
```

```
System.out.println(arr[6]);
```

```
}else if(((day<32&&day>=23 )&&month ==8) || ((day<23&&day>=1 )&& month==9)){
```

```
System.out.println(arr[7]);
```

```
}else if(((day<31&&day>=23 )&&month==9) || ((day<23&&day>=1 )&& month==10)){
```

```
System.out.println(arr[8]);
```

```
}else if(((day<32&&day>=23 )&&month==10) || ((day<22&&day>=1 )&& month ==11)){
```

```
System.out.println(arr[9]);
```

```
}else if(((day<31&&day>=22 )&&month==11) || ((day<22&&day>=1 )&& month==12)){
```

```
System.out.println(arr[10]);
```

```
}else if(((day<32&&day>=22) && month ==12 ) || ((day<20&&day>=1 )&& month==1)){
```

```
System.out.println(arr[11]);
```

```
}
```

}

}

C:\Users\nikhi\Documents\Assignment 3\ZodiacSign.java (Documents) - Sublime Text (UNREGISTERED)

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```
1 import java.io.*;
2 public class ZodiacSign{
3
4     public static void main(String[] args) {
5
6         Console cs = System.console();
7         System.out.println("Enter month :");
8         int month= Integer.parseInt(cs.readLine());
9
10        System.out.println("Enter day :");
11        int day= Integer.parseInt(cs.readLine());
12
13
14        String arr[] = {"Aquarius","Pisces","Aries","Taurus","Gemini","Cancer","Leo","Virgo","Libra","Scorpio","Sagittarius","Capricorn"};
15
16        if(((day<32&&day>=20 )&& month==1 )|| (month ==2 && (day<29&&day>=19 )&& month ==2 )|| ((day<21&&day>=21 )&& month ==3 )|| ((day<20&&day>=20 )&& month ==4 )|| ((day<21&&day>=21 )&& month ==5 )|| ((day<22&&day>=22 )&& month ==6 )|| ((day<23&&day>=23 )&& month ==7 )|| ((day<24&&day>=24 )&& month ==8 )|| ((day<25&&day>=25 )&& month ==9 )|| ((day<26&&day>=26 )&& month ==10 )|| ((day<27&&day>=27 )&& month ==11 )|| ((day<28&&day>=28 )&& month ==12 )){
17
18            System.out.println(arr[month-1]);
19
20        }
21        else if(((day<29&&day>=19 )&& month ==2 )|| ((day<21&&day>=21 )&& month ==3 )|| ((day<20&&day>=20 )&& month ==4 )|| ((day<21&&day>=21 )&& month ==5 )|| ((day<22&&day>=22 )&& month ==6 )|| ((day<23&&day>=23 )&& month ==7 )|| ((day<24&&day>=24 )&& month ==8 )|| ((day<25&&day>=25 )&& month ==9 )|| ((day<26&&day>=26 )&& month ==10 )|| ((day<27&&day>=27 )&& month ==11 )|| ((day<28&&day>=28 )&& month ==12 )){
22
23            System.out.println(arr[month-1]);
24
25        }
26        else if(((day<32&&day>=21 )&& month ==3 )|| ((day<20&&day>=20 )&& month ==4 )|| ((day<21&&day>=21 )&& month ==5 )|| ((day<22&&day>=22 )&& month ==6 )|| ((day<23&&day>=23 )&& month ==7 )|| ((day<24&&day>=24 )&& month ==8 )|| ((day<25&&day>=25 )&& month ==9 )|| ((day<26&&day>=26 )&& month ==10 )|| ((day<27&&day>=27 )&& month ==11 )|| ((day<28&&day>=28 )&& month ==12 )){
27
28            System.out.println(arr[month-1]);
29
30        }
31        else if(((day<31&&day>=20 )&& month ==4 )|| ((day<21&&day>=21 )&& month ==5 )|| ((day<22&&day>=22 )&& month ==6 )|| ((day<23&&day>=23 )&& month ==7 )|| ((day<24&&day>=24 )&& month ==8 )|| ((day<25&&day>=25 )&& month ==9 )|| ((day<26&&day>=26 )&& month ==10 )|| ((day<27&&day>=27 )&& month ==11 )|| ((day<28&&day>=28 )&& month ==12 )){
32
33            System.out.println(arr[month-1]);
34
35        }
36        else if(((day<30&&day>=19 )&& month ==5 )|| ((day<21&&day>=21 )&& month ==6 )|| ((day<22&&day>=22 )&& month ==7 )|| ((day<23&&day>=23 )&& month ==8 )|| ((day<24&&day>=24 )&& month ==9 )|| ((day<25&&day>=25 )&& month ==10 )|| ((day<26&&day>=26 )&& month ==11 )|| ((day<27&&day>=27 )&& month ==12 )){
37
38            System.out.println(arr[month-1]);
39
40        }
41        else if(((day<29&&day>=18 )&& month ==6 )|| ((day<21&&day>=21 )&& month ==7 )|| ((day<22&&day>=22 )&& month ==8 )|| ((day<23&&day>=23 )&& month ==9 )|| ((day<24&&day>=24 )&& month ==10 )|| ((day<25&&day>=25 )&& month ==11 )|| ((day<26&&day>=26 )&& month ==12 )){
42
43            System.out.println(arr[month-1]);
44
45        }
46        else if(((day<28&&day>=17 )&& month ==7 )|| ((day<21&&day>=21 )&& month ==8 )|| ((day<22&&day>=22 )&& month ==9 )|| ((day<23&&day>=23 )&& month ==10 )|| ((day<24&&day>=24 )&& month ==11 )|| ((day<25&&day>=25 )&& month ==12 )){
47
48            System.out.println(arr[month-1]);
49
50        }
51        else if(((day<27&&day>=16 )&& month ==8 )|| ((day<21&&day>=21 )&& month ==9 )|| ((day<22&&day>=22 )&& month ==10 )|| ((day<23&&day>=23 )&& month ==11 )|| ((day<24&&day>=24 )&& month ==12 )){
52
53            System.out.println(arr[month-1]);
54
55        }
56        else if(((day<26&&day>=15 )&& month ==9 )|| ((day<21&&day>=21 )&& month ==10 )|| ((day<22&&day>=22 )&& month ==11 )|| ((day<23&&day>=23 )&& month ==12 )){
57
58            System.out.println(arr[month-1]);
59
60        }
61        else if(((day<25&&day>=14 )&& month ==10 )|| ((day<21&&day>=21 )&& month ==11 )|| ((day<22&&day>=22 )&& month ==12 )){
62
63            System.out.println(arr[month-1]);
64
65        }
66        else if(((day<24&&day>=13 )&& month ==11 )|| ((day<21&&day>=21 )&& month ==12 )){
67
68            System.out.println(arr[month-1]);
69
70        }
71        else if(((day<23&&day>=12 )&& month ==12 )){
72
73            System.out.println(arr[month-1]);
74
75        }
76        else{
77            System.out.println("Invalid input");
78        }
79    }
80 }
```

C:\Windows\System32\cmd.exe

```
C:\Users\nikhi\Documents\Assignment 3>java ZodiacSign.java
Enter month :
12
Enter day :
12
Sagittarius

C:\Users\nikhi\Documents\Assignment 3>java ZodiacSign.java
Enter month :
2
Enter day :
27
Pisces

C:\Users\nikhi\Documents\Assignment 3>java ZodiacSign.java
Enter month :
12
Enter day :
31
Capricorn

C:\Users\nikhi\Documents\Assignment 3>java ZodiacSign.java
Enter month :
4
Enter day :
24
Taurus

C:\Users\nikhi\Documents\Assignment 3>
```

Line 1, Column 1

Tab Size: 4 Java

00:37 03-04-2023