

ADNAN MENDERES UNIVERSITY CSE 203 Object-Oriented Programming

Lab 01

- Download / Install Eclipse.
- You should submit **ONLY solutions of Homework**. Submit **whole java project file in zipped format** and named project file as *NameSurname_studentNo_Lab1*
- Do your homework in **ECLIPSE IDE**.
- Do not use Turkish Characters(ç,ğ,1,ö,ş,ü) for naming project, methods, classes.
- Late submissions are not allowed. **SEND ON TIME**
- You should do homework **YOURSELF**. Group working is not allowed.
- Copy/same/similar homeworks will be evaluated as **0**.
- DO NOT upload a screenshot or something else.
- Use Google Classroom for your questions.

HOMEWORK

1- Print following triangle figures using loops, System.out.print() and System.out.println() functions according to user's input between 1 and 50. Note that, **single space ""** is printed after two digit numbers and **double space ""** is printed after one digit numbers to provide proper triangle shape. Program continues to ask user input until user pressed "**q**". **Sample run:**

```
Enter the number of lines: 6
            1
     4 3 2 1 2 3 4
    4 3 2 1 2 3 4 5
Enter the number of lines: 10
                      1
                     1 2
                   2
                 3 2 1 2 3
                3 2 1 2 3 4
              4 3 2 1 2 3 4 5
           5 4 3 2 1 2 3 4 5 6
          6
          6 5 4 3 2 1 2 3 4 5 6
                 3 2 1 2 3 4 5
                                    7
           5 4
                   2 1 2
            5
                                 6
                                    7
Enter the number of lines: q
Program Terminates
```

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2- Calculate the **first 200 terms of pi number** using given formula. Print 6 decimal after comma for each term (You may format output using printf()).

$$\pi = 4 - \frac{4}{3} + \frac{4}{5} - \frac{4}{7} + \frac{4}{9} - \frac{4}{11} + \cdots$$

Term	Pi
1	4,000000
2	2 , 666667
3	3 , 466667
4	2 , 895238
5	3 , 339683
6	2,976046
7	3 , 283738
8	3 , 017072
9	3 , 252366
10	3,041840
200	