1. Print the following output
   ```
   *
   **
   ***
   ****
   *****
   ```

2. Take a string, integer, char, double input from user and print it using (for input)
   a) InputStreamReader
   b) Scanner Class
   For the further questions use any one method to take inputs

3. Print the sequence shown in 1) but the number rows should be decided by the user

4. Take string input from user and count no of vowels in it

5. Create an integer array, fill it with user's inputs and then sort it with bubble sort

6. Implement a calculator. According to user input, take appropriate no of inputs required and print the result:

User input	Function
1	Addition
2	Subtraction
3	Multiplication
4	Sin
5	Cos
6	Tan
7	Exp (input1^input2)

7. Take two string inputs from the user and check if they are the same (both with and without case-sensitivity)

8. Take an integer input from the user and check if it is palindrome.

9. Write a program to implement the following:
   During acceleration testing you press 1 once when the car leaves the start line and press once again when the car crosses the finish line. The program should print the acceleration time. Now the endurance testing starts and you give an input 2. Now whenever the car passes the startline you press 1 the lap time is printed. Now when acceleration testing starts you press 2 again. At the end of you press 0 to stop the program

10. Take three string inputs representing lap times in minute:seconds:milliseconds format and print which lap was the fastest

11. Take two integer inputs from the user and subtract one from the other without using minus operator

12. Do the 10) question without using if-else

Things to learn:
Java compilation process
Compilers vs Interpreters
Object oriented programming
      What is it ?
      Class, objects, abstraction, encapsulation inheritance and polymorphism
Scope of variables in java
Creating an object of class in java (including how to access functions and data members of the object).
Meaning of static keyword
What are constructors in java
Meaning of 'this' keyword
Using inheritance in java
Using polymorphism in java
Meaning of 'abstract' keyword

13. Do the 7) question again such that the checking is done in a separate function and returns the following:
0: both strings are same with case sensitivity
1: both strings are same without case sensitivity
2: They are not same

14. Do the 5th question again by implementing the bubble sort algorithm in a separate function however the function shouldnt return anything.

15. Implement two classes hello_world and intro such that both are in separate files. Class hello_world has the following methods:
      public static void main ()
      public static void print_hw()
intro has the following methods:
      public static void print_intro()
print_hw() and print_intro() print "Hello World" and "Hi I am a student of MIT" resp. main() function calls print_hw() and print_intro one one after the other. Implement this using:
1. Using an object of type 'intro'
2. Inheritance

16. Create a class MIT and a class student. The class student has the following private data members:
      String Name

int reg_no
String branch.
It also has respective public member functions to both set and print these data members. In the main method of class MIT create 3 objects of type student. Set the values of each data member of each student object (representing actual real life students) and then print them

17.