## TUTORIAL 03

Q1. [1]

public class Main {  
 public static void main(String[] args) {  
 //1  
 for (int i = 1; i < 6; i++) {  
 System.*out*.println(i);  
 }  
 }  
 }

[2]

public class Main {  
 public static void main(String[] args) {

for (int i=0; i<15;i+=2) {  
 if (i!=6) {  
 System.*out*.println(i);  
 }

}

}

[3]

public class Main {  
 public static void main(String[] args) {

int i=0;  
 while (i<15){  
 System.*out*.println(i);  
 i+=2;  
 }  
 }  
}

Q2.

public class Q2 {  
 public static void main(String[] args) {  
 int n = 5;  
 *nbPatter1*(n);  
 }  
  
 public static void nbPatter1(int n) {  
 for (int i = 1; i <= n; i++) {  
 for (int j = 1; j <= i; j++) {  
 System.*out*.print(j + " ");  
 }  
 System.*out*.println();  
 }  
  
 }  
}

[Q3]

import java.util.Scanner;  
  
public class Q3 {  
 public static void main(String[] args) {  
 Scanner input = new Scanner(System.*in*);  
  
 System.*out*.println("Enter a number: ");  
 int nb = input.nextInt();  
  
 System.*out*.println("Enter a letter: ");  
 String letter = input.next();  
  
 int i = 1;  
  
 while (i <= nb) {  
 System.*out*.print(letter+" ");  
 i++;  
 }  
  
 }  
}

[Q4]

import java.util.Scanner;  
  
public class Q4 {  
 public static void main(String[] args) {  
  
 Scanner input = new Scanner(System.*in*);  
  
 System.*out*.println("Enter your nb: ");  
 int nb = input.nextInt();  
  
 if (nb < 0) {  
 System.*out*.println("Can't get factorial for - values.");  
 } else {  
 int Result = *factorial*(nb);  
 System.*out*.println("Factorial of " + nb + " is: " + Result);  
 }  
 }  
  
 private static int factorial(int n) {  
 if (n == 0 || n == 1) {  
 return 1;  
 } else {  
 return n \* *factorial*(n-1);  
 }  
 }  
}

[05]

import java.util.Scanner;  
  
public class Q5 {  
 public static void main(String[] args) {  
  
 Scanner input = new Scanner(System.*in*);  
  
 System.*out*.println("Enter the value of n for Fibonacci series: ");  
 int n = input.nextInt();  
  
 System.*out*.println("Fibonacci series up to " + n + " terms:");  
 for (int i = 1; i <= n; i++) {  
 System.*out*.print(*fibonacci*(i) + " ");  
 }  
 }  
  
 private static int fibonacci(int n) {  
 if (n <= 1) {  
 return n;  
 } else {  
 return *fibonacci*(n - 1) + *fibonacci*(n - 2);  
 }  
 }  
}

[Q6]

import java.util.Scanner;  
  
public class Q6 {  
 public static void main(String[] args) {  
  
 Scanner input = new Scanner(System.*in*);  
  
 System.*out*.println("Enter your first nb: ");  
 double num1 = input.nextDouble();  
  
 System.*out*.println("What do you want,(+,-,/,\*) ");  
 char operator = input.next().charAt(0);  
  
 System.*out*.println("Enter your second nb: ");  
 double num2 = input.nextDouble();  
  
 double result = 0;  
 switch (operator) {  
 case '+':  
 result = num1 + num2;  
 break;  
 case '-':  
 result = num1 - num2;  
 break;  
 case '\*':  
 result = num1 \* num2;  
 break;  
 case '/':  
 if (num2 != 0) {  
 result = num1 / num2;  
 } else {  
 System.*out*.println("Error: Division by zero");  
 return;  
 }  
 break;  
 default:  
 System.*out*.println("Invalid operator");  
 return;  
 }  
  
 System.*out*.println("Result: " + result);  
 }  
}

[Q7]

import java.util.Scanner;  
  
public class Q7 {  
 public static void main(String[] args) {  
 int correctPasscode = 486251;  
  
 int maxAttempts = 4;  
  
 Scanner input = new Scanner(System.*in*);  
  
 int attempts = 0;  
  
 while (attempts < maxAttempts) {  
 System.*out*.print("Enter the passcode: ");  
  
 int userPasscode = input.nextInt();  
  
 if (userPasscode == correctPasscode) {  
 System.*out*.println("Correct passcode");  
 // Exit the program if the passcode is correct  
 break;  
 } else {  
 attempts++;  
 System.*out*.println("Incorrect passcode. Attempts remaining: " + (maxAttempts - attempts));  
 }  
 }  
  
   
 input.close();  
  
 if (attempts == maxAttempts) {  
 System.*out*.println("Maximum attempts reached. Access denied.");  
 }  
 }  
}

[Q10]