**Worksheet 6 – Looping**

1. Write a program which prints all the even numbers from 0 till 100 (0 is an even number).
2. Write a program which asks the user for an integer between 10 and 50 and writes all the integers between that number and 100. Declare 100 in a constant.
3. Write a program which asks the user for his username and password. The program should keep asking for the username until the username entered is “admin” and password is 123.
4. Write a program which keeps asking the user for a number until the user enters a positive value.
5. Write a program which asks the user to enter information about a classroom of students. After each student, the program should ask the user whether he wants to enter more students (Y/N). The program stops when the user presses N.

Add a variable to the program so that before terminating, the program displays how many students the user has entered.

1. Generate a random number between 1 and 10. Afterwards ask the user to enter a number between 1 and 10. If he guesses, the user wins and the game stops. The user has 3 chances to guess. If he doesn’t guess after 3 chances, the computer wins and the game stops.
2. Display the following patterns by using the least possible println commands (use loops)
3. \*\*\*\*\*\*\*
4. \*\*\*

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1. \*\*\*\*

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1. Try to predict the output of the following for loops, and afterwards try them out to check.

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| **Code** | **Output** |
| for (int i = 0; i < 3; i++)  System.out.print(i + 1); |  |
| for (int i = 5; i > 1; i--)  {  if (i == 2) break;  System.out.print(i + " ");  } |  |
| for (int i = 1; i < 5; i++)  {  if (i == 2) continue;  System.out.print(i + " ");  } |  |
| int num = 0;  for (int i = 5; i > 0; i--)  {  if (i % 2 == 1)  num += 1;  }  System.out.println(num); |  |
| int count = 0;  while (count < = 3)  {  count++;  System.out.print(count + " ");  } |  |

1. Write a program which reads 10 values from the user and afterwards prints the lowest and highest value entered.