**Name:** _____ **ID:** _____

**Due:** today or in a lab session next week

**Instructions:**

- Marking lab assignments will be done in the lab
- **Compile** and **Run** your program
- **Show** and **Explain** the output and your code to the lecturer or the lab assistance.

------------------------------------- **Lab Assignments** -------------------------------------

**Lab 1:** Create a counting program that counts from number 25 to 125 in increments of 5 using `for` loop.

**Expected output:**

```
25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125
```

**Lab 2:** Create a counting program that counts backward from number 125 to 5 in decrements of 10 using `while` loop. If the number can be divided by the number 25 and leaves the remainder of 0, the program must continue looping without printing the number.

**Expected output:**

```
115 105 95 85 65 55 45 35 15 5
```

**Lab 3:** An automobile traveled at an average speed of 60 miles per hour from Bangkok to Chantaburi which took four hours. Write a C program that displays the distance driven information every half an hour (in miles) until the end of the trip. Example of the output are as follow:

```
Distance for 0.0 hours is x.xx
Distance for 0.5 hours is xx.xx
Distance for 1.0 hours is xx.xx
...
Distance for 3.5 hours is xx.xx
Distance for 4.0 hours is xx.xx
```

**Note that:** xx.xx is what your program needs to print out.

**Bonus Lab 1:** One interesting application of computers is drawing graphs and bar charts (sometimes is called "histograms"). Write a program to get X integers from a user until a user press the CRTL+Z then display a bar chart of all X numbers (value of number must in a range between 1 to 30). For each number, your program should print a line containing that number of adjacent asterisks. For example, if your program reads the number seven, it should print *******.

**Example output:**

```
Please Enter numbers: 10 11 25 15 30
 10 |**********
 11 |***********
 25 |*************************
 15 |***************
 30 |******************************
^Z
```

```
Please enter numbers:1
1 |*
5
5 |*****
8
8 |********
^Z
```