LAB4

Notes

- Name the file correctly
- Make sure that you're generating a tar file correctly using the command on the wiki "submission" page
- There were a lot of mistakes with either using an incorrect equation or not using the correct parentheses
- If you think your grade doesn't make sense or there are some mistakes please email me within a week when you receive your grades
- I tried to add in comments for each and everyone. So, if the comments doesn't make sense also email me

For Loops

```
for( initialization; looping condition; progression)

{

    //code that repeats

}
```

Parts of a for loop are: **initialization**, **looping condition** **and a progression**

Example

- for (int i = 0; i < 5; i++) {

     }


- ```
int main () {
      for (; ;) {
           printf ("This loop will run forever.\n");
      }

      return 0;
   }
```

# ASCII

Develop a program that displays a menu with 3 options:

- Option 1: The user inputs an integer value in the range (33 - 126) inclusively and you display the equivalent ASCII character. HINT: use (char)x to convert the integer value to the equivalent character value

- Option 2: List all ASCII values from 33-126

- Option 3: Exit and display nothing

# Gibonnacci

$G_0 = 5$

$G_1 = 7$

$G_n = G_{n-1} + G_{n-2}$

Here's the first few numbers in the sequence:

- 5, 7, 12, 19, 31, 50, 81, 131, 222, 253, 475*

```
How many Gibbonacci numbers do you want printed?: 8

 5, 7, 12, 19, 31, 50, 81, 131
```

Outbreak

Flu season is upon us and the number of people getting sick is growing.

- On day 1, there was only 1 person with the flu.
- On day 2, it jumped to 4.
- On day 3, there were 21
- Every day since, the number of people who have the flu is equal to the last 3 days combined

Prime Detector

- Ask the user for a number that is larger than 1 and check whether it's a prime number or not
- Display something like: prime, not prime or invalid (for when the number entered is 0)