CSE2005 Operating Systems

10/09/19

Lab Assessment

1. Code the Banker's algorithm in C and test the working of it with arbitrary inputs.
2. Write a C program to list the users who have logged in more than once.
3. Write a bash script to accept "n" marks (inside a loop), if mark is less than zero ignore it and accept again. Further compute the average of "n" marks and display the grade according to the condition given below.

   'S grades' if average > 90

   'A grade' if average >= 80 and average < 90

   'B grade' if average >= 70 and average < 80

   'C grade' if average >= 60 and average < 70

   'D grade' if average >= 55 and average < 60

   'E grade' if average >= 50 and average <55

   'F grade' if average < 50

   Your script should repeat the same "N" times.

4. Write a bash script to display all files in the /home/YourLoginName subdirectory as well as display the type of all files. If the file is an ordinary file print its permission and change the permissions to r - - r - - r - - .
5. Write a bash script to print the pattern given below.

```
                1
              1 2 1
            1 2 3 2 1
          1 2 3 4 3 2 1
        1 2 3 4 5 4 3 2 1
```

6. Write a menu driven bash script (using a case structure) to perform the following.
   a. Print first 'n' Triangular numbers
   b. Check if a number is an Automorphic number
   c. Check if a number is an Abundant number