Assignment 8: Programming bash

1. Write a script to see current date, time, username and current directory.
2. Write a shell script to find biggest of three numbers.
3. Read a number find if it is even or odd.
4. Write a shell script to check whether a given number is leap year or not.
5. Shell script to check number is positive or not.
6. Write script to print given number in reverse order. (123 should be 321)
7. Print sum of all digits. For 123 it will be 1+2+3 = 6.
8. Write a shell script program to print the series
   ```
   1
   2 3
   4 5 6
   7 8 9 10
   ```
9. Write a shell script program to print Fibonacci series of a given number.
10. How to perform real number calculation in shell script and store result to third variable, say a=5.66, b=8.67, c=a+b?
11. How to write script, that will print, Message "Hello World" , in b and blink effect, and in different colors like red, brown *etc*. using echo command.
12. Write a shell program to check whether a given string is palindrome or not.
13. How would you replace the character 'n' in a file with string 'xyz'?
14. How would you delete a word from a file using shell scripting?
15. Use 'case' statement to perform math operations (+, -, /, *) as follows:
    ```
    $ ./script 20 / 5
    20 / 5 = 4
    ```
16. Write script to determine whether given file exists or not. File name is supplied as command line argument.
17. Write script called hello.sh. Put this script into your startup file called .bash_profile. The script should run as soon as you logon to system, and it print any one of the following message according to system time:
    Good Morning/Good Afternoon/Good Evening, according to system time.
18. Write script to implement background process that will continually print current time in upper right corner of the screen , while user can do his/her normal job at prompt.
19. Write script to implement getopts statement, your script should understand following command line argument called this script.
    ```
    $ ./script -c -d
    ```
    Where options work as:
    -c clear the screen
    -d show list of files in current working directory