SSN COLLEGE OF ENGINEERING, KALAVAKKAM
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
Simple Programs using shell scripts

1. Write a shell script that prints “Shell Scripting is Fun!” on the screen. Modify the shell script above to include a variable. The variable will hold the contents of the message “Shell Scripting is Fun!”

2. Print the values of the environment variables HOME, USER, SHELL and PATH with set, print env and echo.

3.Store the output of the command “hostname” in a variable. Display “This script is running on _.” where “_” is the output of the “hostname” command.

4. Get two numbers a and b from user using read statement. Do the following:
   a. Add the two numbers
   b. Subtract the numbers
   c. Multiply the numbers
   d. Divide the numbers
   Print the result.

5. Get length and breadth for a rectangle and radius for a circle using command line argument. Calculate area and perimeter of the rectangle and also area and circumference of a Use the special character data types and display the arguments using them

6. Temperature of a city in Fahrenheit degree is input through the keyboard. Write a program to convert this temperature into Centigrade degrees.
Formula is
c = (f - 32)*5 /9
f=9/5*c+32

7. Write a shell script to calculate the net salary of an employee in a particular month considering various allowances (TA, DA, HRA) and deductions (INCOME TAX, PROVIDEND FUND) as:
a. TA=15 percent of basic salary
b. DA=2 percent of basic salary
c. HRA=10 percent of basic salary
d. INCOME TAX=5 percent of salary
e. PROVIDEND FUND=10 percent of salary

8. In a town, the percentage of men is 52. Rest all are women. The percentage of total literacy is 48. If total percentage of literate men is 35 of the total population, WAP to find the total number of illiterate men and women. The population of the town is 80,000.

9. Write a shell script that displays “man”,”bear”,”pig”,”dog”,”cat”,and “sheep” on the screen with each appearing on a separate line. Use special characters to display the filename, no of parameters, display the arguments each on one line, use appropriate command to dispaly the differences between $@, $*. Explain how about the status code of the script.

10. Write a shell script that prompts the user for a name of a file or directory and reports if it is a regular file, a directory, or another type of file. Also perform an ls command against the file or directory with the long listing option.

11. Modify the previous script to that it accepts unlimited number of files and directories as arguments and display the information about it. (use cat for files and ls-l for directories)

12. Write a shell script to display the current date and cut down the month of the date and store it in the file date.txt. Use ` ` in the command to store the content in the file and display the file. Also use an alias function to cut down the day of the week and execute the command.

13. Create the following files and change the permissions specified
File1 701
File2 400
File3 300
File4 676
File5 045
File6 177
File7 234
File8 507
Write a shell script to find the number of readable, writable and executable files.

13. Write the shell script that renames all files in the current directory that end in “.jpg” to begin with today’s date in the following format: YYYY-MM-DD. For example, if a picture of my cat was in the current directory and today was October 31,2016 it would change name from “mycat.jpg” to “2016–10–31-mycat.jpg”.

14. Write a script that executes the command “cat/etc/shadow”. If the command return a 0 exit status, report “command succeeded” and exit with a 0 exit status. If the command returns a non-zero exit status, report “Command failed” and exit with a 1 exit status.