



## Week 1: Assignment 1

### Getting started with Shell Scripting

[ Last Updated on: **08th March 2021, 16:00 Hrs** ]

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#### Aim

In this assignment, you will be getting started with **Shell (.sh)** scripting. You will be using few shell commands to work with input arguments in a shell file.

The program is ideally expected to alphabetically sort the CSV file provided as input argument based on the first column data.

#### Given

Two files are provided to solve this assignment.

- Skeleton program file: **assignment1.sh**
- Sample CSV file: **assignment1\_sample.csv**

#### Procedure

- Open the skeleton program file, **assignment1.sh**.
- You will notice pre-written comments included in skeleton program for your assistance to solve the assignment.
- To run and debug your solution, type the below command in Terminal:

```
$ bash assignment1.sh assignment1_sample.csv
```



This command will run the shell script **assignment1.sh** with the input argument of provided CSV file.

- Refer the **Expected Output** section below and debug your code to get the correct output.

## Expected Output

- The provided sample CSV file, **assignment1\_sample.csv** consists data with fields: **First Name**, **Last Name**, **Gender** and **email ID**.
- For example, consider the first 10 rows from this CSV file as shown below:

```
First Name,Last Name,Gender,email ID
Fowler,Matschuk,Male,fmatschuk0@twitpic.com
Berget,Grigoriscu,Female,bgrigoriscu1@altervista.org
Thor,Goburn,Male,tgoburn2@microsoft.com
Sile,Barhams,Female,sbarhams3@accuweather.com
Valle,Houldey,Male,vhouldey4@npr.org
Miguel,Scotti,Male,mscotti5@comsenz.com
Bear,Darwen,Male,bdarwen6@ebay.com
Camila,Kelson,Female,ckelson7@ca.gov
Julian,McCarlich,Male,jmccarlich8@pinterest.com
```



- The expected output of program **assignment1.sh** i.e., alphabetically sorting the above data based on first column is shown below:

```
Bear,Darwen,Male,bdarwen6@ebay.com
Berget,Grigoriscu,Female,bgrigoriscu1@altervista.org
Camila,Kelson,Female,ckelson7@ca.gov
First Name,Last Name,Gender,email ID
Fowler,Matschuk,Male,fmatschuk0@twitpic.com
Julian,McCarlich,Male,jmccarlich8@pinterest.com
Miguel,Scotti,Male,mscotti5@comsenz.com
Sile,Barhams,Female,sbarhams3@accuweather.com
Thor,Goburn,Male,tgoburn2@microsoft.com
Valle,Houldey,Male,vhouldey4@npr.org
```



## Grading and Submission Instructions

- Navigate to the folder where the **ey-mooc-grader-sfc** application resides.
- To grade your solution, run the **check** command of the application as follows:

```
$ ./ey-mooc-grader-sfc check -w 1 -a 1 Week_1/Assignment_1/assignment1.sh
```



- This will run your program **assignment1.sh** against random test cases and grade it. Marks and appropriate remarks will be provided as shown in Figure 1.
- Your program file **assignment1.sh**, marks scored and remarks will get uploaded to the MOOC portal.

```

erts-09@erts:~/Desktop/SFC_PartI_MOOC
File Edit View Search Terminal Help
~/Desktop/SFC_PartI_MOOC 20:15:19
./ey-mooc-grader-sfc check -w 1 -a 1 Week_1/Assignment_1/assignment1.sh

Course Name: Software Foundation (Part I)

Checking your submission for Week - 1 Assignment number - 1

Checking submission type ...
Submission type is accepted

Downloading test scripts ...
100% [.....] 29974 / 29974
Download complete

Extracting files ...
Extraction complete

#### RESULT ####
+-----+-----+-----+-----+
| TEST CASE NUMBER | TEST CASE PASSED? (Y/N) | MARKS SCORED | REMARKS |
+-----+-----+-----+-----+
| 1 | Y | 3.33 | Good work. |
| 2 | Y | 6.66 | Good work. |
| 3 | Y | 9.99 | Good work. |
+-----+-----+-----+-----+

REMARKS = Congrats! You have successfully completed the assignment. Keep it up!
MARKS = 10

MARKS AND REMARKS UPLOADED ON THE PORTAL SUCCESSFULLY

~/Desktop/SFC_PartI_MOOC 20:15:43

```

Figure 1: Output of running check command for Week 1 Assignment 1

- You can verify this by running the **status** command of the application as given below, refer Figure 2.

\$ ./ey-mooc-grader-sfc status -w 1 -a 1

```

erts-09@erts:~/Desktop/SFC_PartI_MOOC
File Edit View Search Terminal Help
~/Desktop/SFC_PartI_MOOC 20:16:59
./ey-mooc-grader-sfc status -w 1 -a 1

Course Name: Software Foundation (Part I)

Checking status of your submission for Week - 1 Assignment number - 1

#### LAST RECORDED RESULT ####

REMARKS      : Congrats! You have successfully completed the assignment. Keep it up!
MARKS        : 10
UPLOAD DATE-TIME : 2021-04-03 20:15:43

~/Desktop/SFC_PartI_MOOC 20:17:09

```

Figure 2: Output of running status command for Week 1 Assignment 1

## References

- Nano Editor
  - [How to use Nano Text Editor](#)
  - [Nano Editor Official Docs](#)
- Vim Editor
  - [Interactive Vim Tutorial](#)
- Passing arguments to Bash script

- [Bash Scripting Tutorial](#)
  - Sort command
    - [Man Page of Sort with examples](#)
- 

**All The Best!**

