2. As part of data file submission to a platform, the administrator needs to create a set of initial passwords for the students. The password creation is done in the following way. The first part of the password is department code in capital letters followed by the numeric part of the roll number (the last 3 characters of the roll number) followed by the length of the string in their name (this will also count the spaces). Followed by the program in which the student is enrolled in small letter.

    For example, if the roll number is **ME18B009** and the name is **Bharath Chandar** then the password will be **ME00915b**. Use the RollList.csv file available from the above question and write a script to generate the password for all the students.

    The solution includes the script and the password list. [2 Marks]

    Hint: You can use a shell script or awk script to achieve this.

    Application: Applications may need to generate clear text passwords according to certain rules to be given to first time users.

Link to the GitHub repository for this question: GitHub

This awk script takes in the RollList.csv and preprocesses each line and outputs the password in the correct format.

```
1.  #!/usr/bin/gawk -f
2.  BEGIN{
3.     FS = ",";
4.
5.     # Printing the header
6.     printf("Roll,Name,Password\n");
7.  };
8.
9.  {
10.   # Saving the roll number in the variable roll
11.   roll = $1;
12.   # Saving the name in the variable name
13.   name = $2;
14.
15.   # Stripping the 1st and 2nd characters of the roll number
16.   depart = substr(roll, 1, 2);
17.   # Stripping the last three characters of the roll number
18.   id = substr(roll, 6, 3);
19.   # Stripping the 5th characrer of the roll number and storing its lower case
20.   group = tolower(substr(roll, 5, 1));
21.
22.   # Finding the length of name
23.   len_name = length(name);
24.
25.   printf("%s,%s,%s%s%s%s\n", roll, name, depart, id, len_name, group);
26.
27. };
28.
29. END{
30. };
31.
```
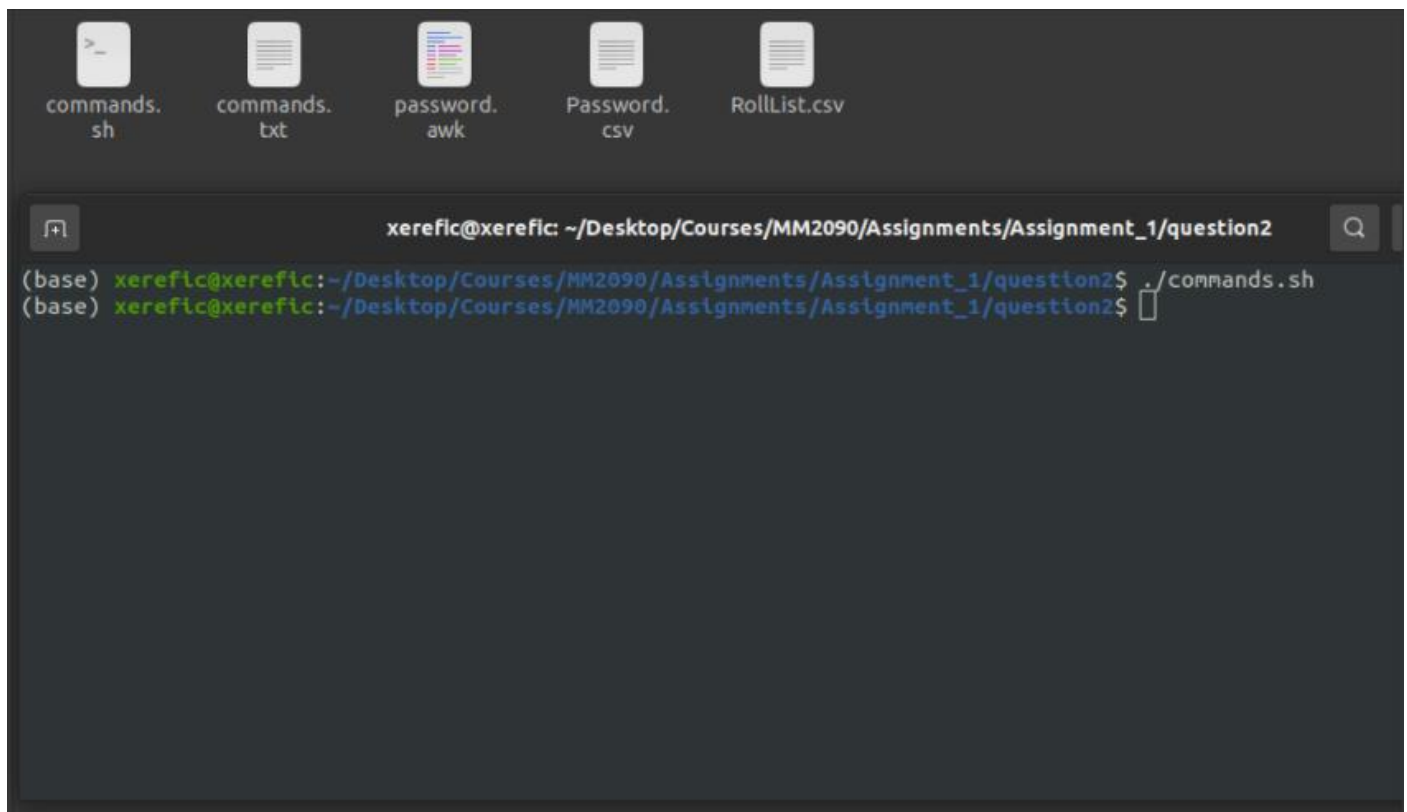
This bash scripts calls the password.awk wrapper to get the passwords of the students in the RollList.csv

```
1.  #!/bin/bash
2.
3.  ./password.awk < RollList.csv > Password.csv
4.
```

Using this command will display only the passwords which can be piped to a file accordingly.

```
1.  cat Password.csv | cut -d ',' -f 3
```

Assignment 1 – Question 2

Archish S
me20b032
Batch 7

TERMINAL:

PS: Commands.txt was another approach that I was trying.

OUTPUT:

Roll	Name	Password
CE19B089	Sruthi Sreeram	CE08914b
ME18B009	Bharath Chandar	ME00915b
ME18B020	Aravindh P	ME02010b
ME18B027	Rajasundaram M	ME02714b
ME18B033	Suganth NN	ME03310b
ME18B046	Deepak G	ME0468b
ME18B086	Arvind Raghav V	ME08615b
ME18B089	Sriharan BS	ME08911b
ME18B145	Ashwin Kumar KS	ME14515b
ME18B146	Vikas Mahendar K	ME14616b
ME18B152	Manoj S	ME1527b
ME18B156	Mukesh V	ME1568b
ME18B157	Mukund Varma T	ME15714b
ME19B001	Abhigyan Chattopadhyay	ME00122b
ME19B003	Akshay Sunil	ME00312b
ME19B003	Akshay Sunil	ME00312b
ME19B012	Dhananjay B	ME01211b
ME19B013	Dhruv Bhatia	ME01312b
ME19B023	Krishna Somasundaram RM	ME02323b
ME19B035	Shreyas S. Paranjape	ME03520b
ME19B036	Parth Lathi	ME03611b
ME19B048	Shyam Sundar PB	ME04815b
ME19B052	Tadeparti Sidharth	ME05218b
ME19B057	Vasudeva Tushar Nilker	ME05722b
ME19B060	Vishalroshan A	ME06014b
ME19B061	Pavithra Mohan	ME06114b
ME19B063	Aditi Kumar	ME06311b
ME19B076	Alphin Davis Pomy	ME07617b
ME19B079	Ananthalakshmi N	ME07916b
ME19B082	Arvind Car	ME08210b
ME19B085	Ashwin Upamanyu Dev	ME08519b
ME19B091	Aswin Raj CR	ME09112b
ME19B095	Krishnathejus D	ME09515b
ME19B098	Abhishek Dhalpe	ME09815b
ME19B105	Gautham Raghav S	ME10516b
ME19B106	Gowrishankar Manu	ME10617b
ME19B107	Gunda Mahathi	ME10713b
ME19B108	Harsh Gupta	ME10811b
ME19B114	Jay Pratik Sanghavi	ME11419b
ME19B121	Kalisytharth SK	ME12115b
ME19B123	Karthik Karumanchi	ME12318b
ME19B128	Srividya L	ME12810b
ME19B131	Manasa Madela	ME13113b
ME19B135	Neelanjana Pramod	ME13517b

ME19B149	Prasanth S	ME14910b
ME19B150	Prathamesh A Jain	ME15017b
ME19B152	Preetha Devi A	ME15214b
ME19B155	Rohan H Rao	ME15511b
ME19B159	Sachin Sagar	ME15912b
ME19B163	Saroopa G	ME1639b
ME19B167	Shreyas Madhav Kulkarni	ME16723b
ME19B175	Srinidhi N	ME17510b
ME19B176	Subham Khan	ME17611b
ME19B177	Suraj Rathi	ME17711b
ME19B179	Tejas Rao M	ME17911b
ME19B185	Vedant Limaye	ME18513b
MM18B034	Shrutasom Das	MM03413b
MM19B002	Akshat Joshi	MM00212b
MM19B005	Bipin V	MM0057b
MM19B009	Kanishkan MS	MM00912b
MM19B012	Pragalbh Vashishtha	MM01219b
MM19B014	Vishnupriyan R	MM01414b
MM19B015	Jai Santhoshi S	MM01515b
MM19B016	Aakhyat Singh	MM01613b
MM19B018	Aditya Raj	MM01810b
MM19B021	Ayesha Ulde	MM02111b
MM19B027	Bhuvanesh P	MM02711b
MM19B029	Chirantandip Mahanta	MM02920b
MM19B031	Gayathri Shrushti V	MM03119b
MM19B033	Hrishabh Srivastava	MM03319b
MM19B038	Mahesh R	MM0388b
MM19B040	Nagappan N	MM04010b
MM19B043	Hardhik Pinjala	MM04315b
MM19B044	Pranav Choudhari	MM04416b
MM19B045	Aswanth R	MM0459b
MM19B046	Rishaab Karthik R	MM04617b
MM19B049	Rohan Korale	MM04912b
MM19B054	Shreya Smitha	MM05413b