Q1. A) Write and execute the following Commands on Linux

   i) Write a command to display name of working directory.

      pwd

   ii) Accept the file and display that file along with line numbers.

      echo "Filename"

      read filename Wc -l

      $filename

   iii) Create the following text file class.txt and write commands based on it.

        FYBCA SCIENCE

        SYBCA SCIENCE

        TYBCA SCIENCE

        FYBCA SCIENCE

        Remove duplicate entries from above file.

      sort class.txt | uniq

   iv) Create file as follows and write commands for same.

        Linux

        Unix

        Solaris

        HPUX

        AIX

        Write a linux command to merge a file by pasting the data into 2 columns

echo -e "Linux\nUnix\nSolaris\nHPUX\nAIX" > myfile.txt

pr -2 -t myfile.txt

   v) Write the vi command to open 'faculty' file in read only mode.

      vi -R faculty

Q1.B) Write a shell script to accept a directory name and display its contents.

```bash
#!/bin/bash
echo "Enter directory:"
read directory
if [ ! -d "$directory" ]; then
   echo "Error: '$directory' is not a directory or does not exist."
   exit 1
fi
ls "$directory"
```

Q2. Write menu driven program to perform arithmetic operations like +, - , *, /.

```bash
#!/bin/bash
echo "Enter the first number:"
read a
echo "Enter the second number:"
read b
while true; do
   echo -e "\nChoose an operation:"
   echo "1. Addition"
   echo "2. Subtraction"
   echo "3. Multiplication"
   echo "4. Division"
   echo "5. Exit"
   read -p "Enter your choice: " choice

   case $choice in
      1)
         echo "Result of addition: $(($a + $b))"
         ;;
      2)
         echo "Result of subtraction: $(($a - $b))"
         ;;
      3)
         echo "Result of multiplication: $(($a * $b))"
         ;;
      4)
         if [ $b -ne 0 ]; then
            echo "Result of division: $(($a / $b))"
         else
            echo "Error: Division by zero"
         fi
         ;;
      5)
         echo "Exiting..."
         exit 0
         ;;
      *)
         echo "Invalid choice. Please enter a number between 1 and 5."
         ;;
   esac
done
```

Or

Q2. Write a shell script to display first 10 odd numbers and their sum.

```bash
#!/bin/bash  sum=0
echo "First 10 odd numbers:"
for ((i = 1; i <= 19; i += 2)); do
   echo $i
   sum=$((sum + i))
done
echo "Sum of the first 10 odd numbers: $sum"
```