1.
SCRIPT:

```
echo "Enter Choice :"
echo "1. Addition"
echo "2. Subtraction"
echo "3. Multiplication"
echo "4. Division"
read ch

# Switch Case to perform
# calulator operations
case $ch in
  1)  res=`echo $1 + $2 |bc`
  ;;
  2)  res=`echo $1 - $2 |bc`
  ;;
  3)  res=`echo $1 \* $2 |bc`
  ;;
  4)  res=`echo $1 / $2 | bc`
  ;;
esac
echo "Result : $res"
```

OUTPUT:

```
root@WPL-31:~/Desktop# ./calca.sh 10 5
Enter Choice :
1.  Addition
2.  Subtraction
3.  Multiplication
4.  Division
4
Result : 2
root@WPL-31:~/Desktop# ./calca.sh 10 5
Enter Choice :
1.  Addition
2.  Subtraction
3.  Multiplication
4.  Division
1
Result : 15
root@WPL-31:~/Desktop# ./calca.sh 10 5
Enter Choice :
1.  Addition
2.  Subtraction
3.  Multiplication
4.  Division
2
Result : 5
root@WPL-31:~/Desktop# ./calca.sh 10 5
Enter Choice :
1.  Addition
2.  Subtraction
3.  Multiplication
```

4. Division
3
Result : 50

5.
SCRIPT:

```
#!/bin/sh


echo "The name of the script file is $0"


echo "Total number of arguments passed to the script = $#"


if [ $# -gt 0 ]
then

  echo "List of arguments:"
  for arg in $@
  do
    echo "$arg"
  done

else

  echo "No argument provided to the script."

fi
```

OUTPUT:

```
root@WPL-31:~/Desktop# chmod +x print.sh
root@WPL-31:~/Desktop# ./print.sh ssn 1 college engineering 2 cse
department
The name of the script file is ./print.sh
Total number of arguments passed to the script = 7
List of arguments:
ssn
1
college
engineering
2
cse
department
```

6.
SCRIPT:

```
#!/bin/bash
linecount()
{
num_of_lines=$(wc -l "$0")
}
linecount $0
echo $num_of_lines
```

OUTPUT:

```
root@WPL-31:~/Desktop# ./countl.sh
7 ./countl.sh
```

7.

SCRIPT:

```
#!/bin/bash
compare()
{
if [$1<$2];then
      x=2;
elif [$1>$2];then
      x=1;
else
      x=0;
fi
}
compare $1 $2
echo $x
```

OUTPUT:

```
root@WPL-31:~/Desktop# ./cmp.sh hello world
1
```

8.

SCRIPT:

```
#!/bin/bash
i="y"
echo "Enter name of database "
read db
while [ $i = "y" ]
do
clear
echo "1.View the Data Base "
echo "2.View Specific Record "
echo "3.Add Records "
echo "4.Delete Records "
echo "5.Exit "
echo "Enter your choice "
read ch
    case $ch in
        1)  cat $db;;
        2)  echo "Enter name"
          read name
            grep -i "$name" $db;;
        3)  echo "Enter new rate of work"
          iread rate_of_work
          echo "Enter new name:"
          read tnm
          echo "Enter hours fo work"
          read h_work

          echo "$nm    $rate_of_work    $h_work  ">>$db;;
        4)  echo "Enter name"
          read name
```

```
        # set -a
    #    sed '/$name/d' $db>dbs1
        grep -v "$name" $db >dbs1
          echo "Record is deleted"
         cat dbs1;;
        5)  exit;;
        *)echo "Invalid choice ";;
    esac
echo "Do u want to continue ?"
read i
if [ $i != "y" ]
then
    exit
fi
done
```