

CS266

ASSIGNMENT 2

NAME:

ARCHIT AGRAWAL

ROLL NO. :

202051213

SECTION:

2

Based on shell script

1. Write a shell script to find whether an input integer is even or odd.

```
1 echo "Enter a number to find if it is even or odd."
2 read n
3 echo "Input = $n"
4 if [ `expr $n % 2` == 0 ]
5 then
6     echo "$n is even"
7 else
8     echo "$n is odd"
9 fi
```

Output

```
Enter a number to find if it is even or odd.
Input = 5
5 is odd
```

```
Enter a number to find if it is even or odd.
Input = 48
48 is even
```

```
Enter a number to find if it is even or odd.
Input = -1
-1 is odd
```

```
Enter a number to find if it is even or odd.
Input = 00
00 is even
```

2. Write a shell script to find whether an input year is leap year or not.

```
1  echo "Enter an year to find if it is leap year or not."
2  read n
3  echo "Input Year = $n"
4
5  if [ `expr $n % 400` == 0 ]
6  then
7      echo "$n is leap year"
8  elif [ `expr $n % 100` == 0 ]
9  then
10     echo "$n is not a leap year"
11 elif [ `expr $n % 4` == 0 ]
12 then
13     echo "$n is leap year"
14 else
15     echo "$n is not a leap year"
16
17 fi
18
```

Output

Enter an year to find if it is leap year or not.

Input Year = 2016

2016 is leap year

Enter an year to find if it is leap year or not.

Input Year = 2022

2022 is not a leap year

Enter an year to find if it is leap year or not.

Input Year = 2000

2000 is leap year

Enter an year to find if it is leap year or not.

Input Year = 1900

1900 is not a leap year

3. Write a shell script to find out the length of an input string.

```
1 echo "Enter a string to find its length"
2 read s
3 echo "Input String : $s"
4 echo "The length of string is ${#s}"
5
```

Output

```
Enter a string to find its length
Input String : My name is Archit Agrawal
The length of string is 25
```

```
Enter a string to find its length
Input String : Give me some sunshine
The length of string is 21
```

```
Enter a string to find its length
Input String : abcdefghijklmnopqrstuvwxyz
The length of string is 26
```

```
Enter a string to find its length
Input String : 0123456789
The length of string is 10
```

```
Enter a string to find its length
Input String :
The length of string is 0
```

4. Write a shell script to concatenate two strings input by the user.

```
1 echo "*** CONCATENATING TWO STRINGS ***"
2
3 read -p "Enter two strings" s1 s2
4
5 echo "String 1 : $s1"
6 echo "String 2 : $s2"
7
8 s3="$s1 $s2"
9 echo "Concatenated string : $s3"
```

Output

```
*** CONCATENATING TWO STRINGS ***
String 1 : Hello
String 2 : World!
Concatenated string : Hello World!
```

```
*** CONCATENATING TWO STRINGS ***
String 1 : Archit
String 2 : Agrawal
Concatenated string : Archit Agrawal
```

```
*** CONCATENATING TWO STRINGS ***
String 1 : 202051213
String 2 : Archit
Concatenated string : 202051213 Archit
```

```
*** CONCATENATING TWO STRINGS ***
String 1 : Computer
String 2 : Science
Concatenated string : Computer Science
```

5. Write a shell script to print multiplication table of a number which is given by user.

```
1 echo "Enter the number whose table you want to print"
2 read n
3 echo "Input number = $n"
4 i=1
5 while [ $i -le 10 ]
6 do
7     echo " $n x $i = $(( n*i ))"
8     i=$(( i+1 ))
9 done
```

Output

```
Enter the number whose table you want to print
Input number = 8
8 x 1 = 8
8 x 2 = 16
8 x 3 = 24
8 x 4 = 32
8 x 5 = 40
8 x 6 = 48
8 x 7 = 56
8 x 8 = 64
8 x 9 = 72
8 x 10 = 80
```

```
Enter the number whose table you want to print
Input number = -5
-5 x 1 = -5
-5 x 2 = -10
-5 x 3 = -15
-5 x 4 = -20
-5 x 5 = -25
-5 x 6 = -30
-5 x 7 = -35
-5 x 8 = -40
-5 x 9 = -45
-5 x 10 = -50
```