

COAL FALL 2021

BSCSF20

Lab # 3

You are required to prepare the ASM file of each task.

Task 1:

Write an Assembly Language Program to display a character.

Task 2:

write an Assembly Language Program to read a character and display it on a new line.

Task 3:

Write an Assembly Language Program to display a string.

Task 4

Write a program to display a 10 x 10 solid box of asterisks. [use nested loop only]

Sample execution:

```
*****  
  
*****  
  
*****  
  
*****  
  
*****  
  
*****  
  
*****  
  
*****
```

Task 5

Write a Program which accepts a alphabet from user and toggle it's case.

Sample execution:

Enter a character: A

You enter: a

Task-06

An Assembly Language Program to display a "?", read two capital letters, and display them on the next line in alphabetical order.

Sample Run

? XQ

QX

Task-07

Write a program that

- a) Take two inputs only digits
- b) Display the sum of given digits, if sum of given digits is greater than 9 then your program shows an error message.

Sample Run

- i) Enter two digits: 56
Error! Sum is greater than 9.
- ii) Enter two digits: 34
Sum is 7

Task-08

Write a program that

- a) Take two digits from user as input and one operator (+ or -)
- b) If operator is + than program should display there sum or if operator is – than your program display there difference. [Assume that the result of given operator is in range of 0 to 9]

Sample Run

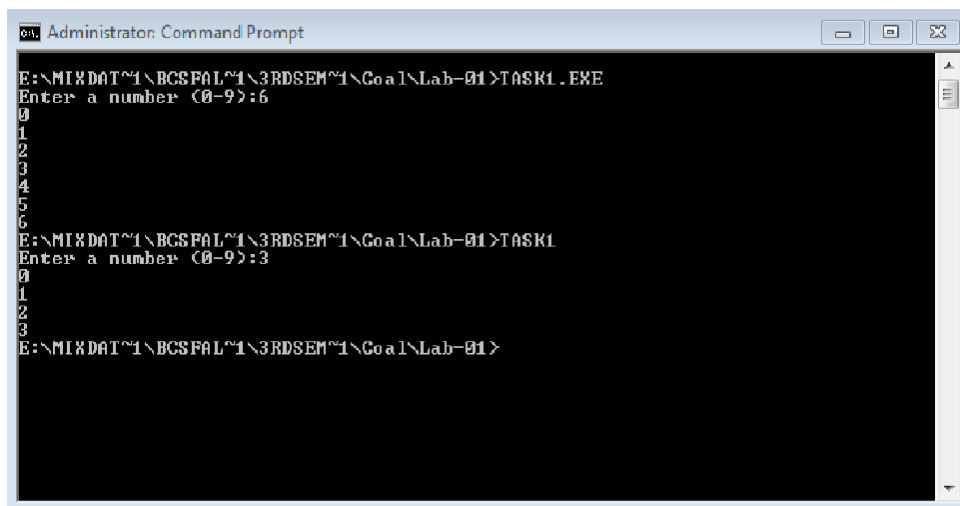
- i)
Enter two digits: 34
Enter operator: +
Sum is 7
- ii)
Enter two digits: 62
Enter operator: -
Difference is 4

Task 9

Write a program that

- a) Take input a number from 0-9
- b) Display counting from 0 to that number.

Sample Run

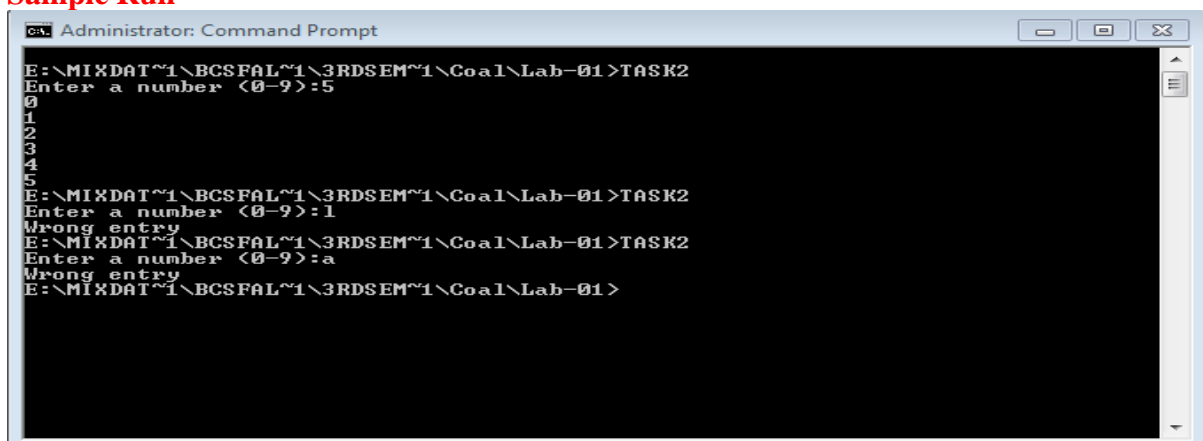


```
Administrator: Command Prompt
E:\MIXDAT~1\BCSFAL~1\3RDSEM~1\Coal\Lab-01>TASK1.EXE
Enter a number <0-9>:6
0
1
2
3
4
5
6
E:\MIXDAT~1\BCSFAL~1\3RDSEM~1\Coal\Lab-01>TASK1
Enter a number <0-9>:3
0
1
2
3
E:\MIXDAT~1\BCSFAL~1\3RDSEM~1\Coal\Lab-01>
```

Task-10

Extend the **Task 9** so that if the user enters the invalid input it should display an error message.

Sample Run

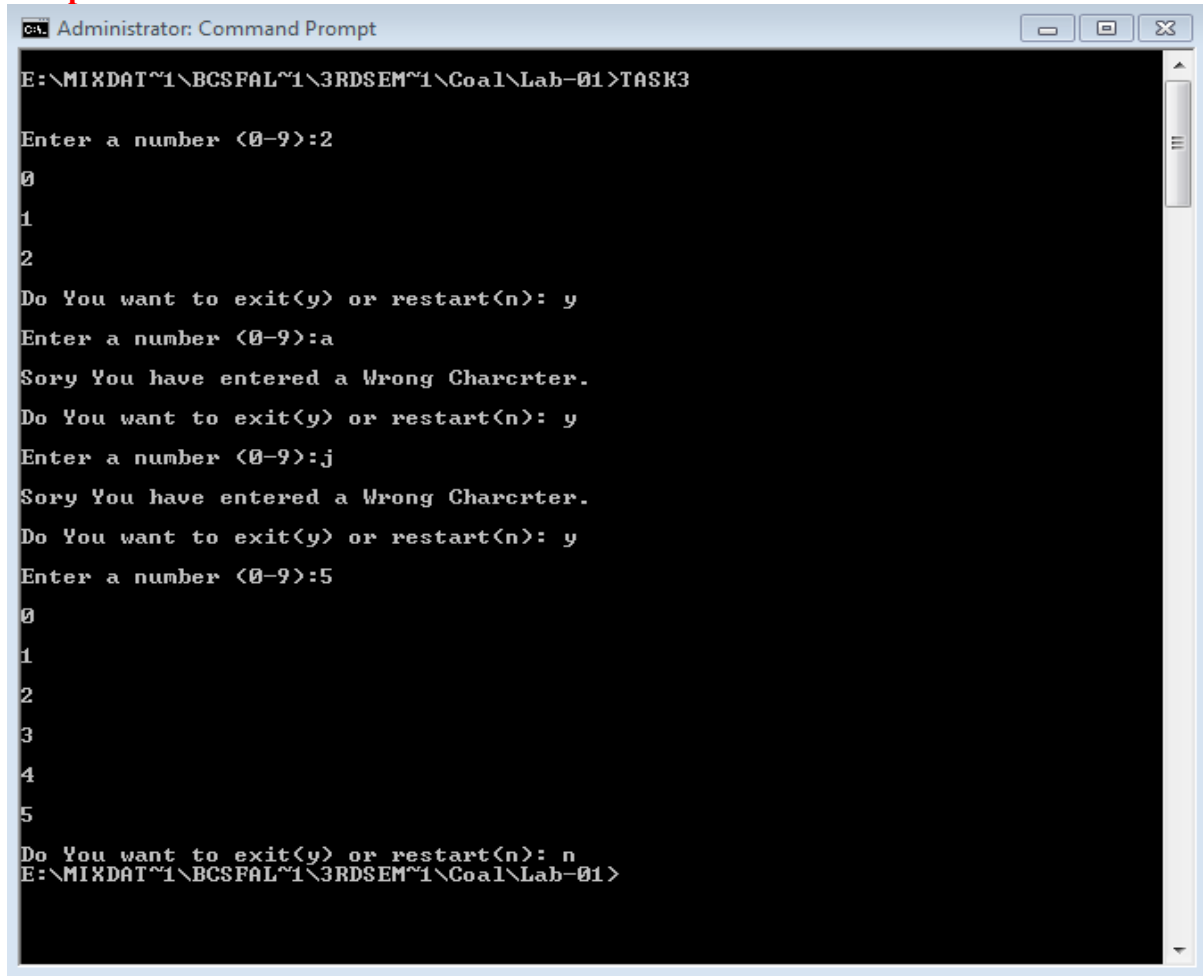


```
Administrator: Command Prompt
E:\MIXDAT~1\BCSFAL~1\3RDSEM~1\Coal\Lab-01>TASK2
Enter a number <0-9>:5
0
1
2
3
4
5
E:\MIXDAT~1\BCSFAL~1\3RDSEM~1\Coal\Lab-01>TASK2
Enter a number <0-9>:1
Wrong entry
E:\MIXDAT~1\BCSFAL~1\3RDSEM~1\Coal\Lab-01>TASK2
Enter a number <0-9>:a
Wrong entry
E:\MIXDAT~1\BCSFAL~1\3RDSEM~1\Coal\Lab-01>
```

Task-11

Extend the task 10 so that your program after output should ask the user if he/she want to restart or not. If input is y then continue otherwise terminate it.

Sample Run



```
Administrator: Command Prompt
E:\MIXDAT~1\BCSPAL~1\3RDSEM~1\Coal\Lab-01>TASK3

Enter a number <0-9>:2
0
1
2
Do You want to exit(y) or restart(n): y
Enter a number <0-9>:a
Sorry You have entered a Wrong Character.
Do You want to exit(y) or restart(n): y
Enter a number <0-9>:j
Sorry You have entered a Wrong Character.
Do You want to exit(y) or restart(n): y
Enter a number <0-9>:5
0
1
2
3
4
5
Do You want to exit(y) or restart(n): n
E:\MIXDAT~1\BCSPAL~1\3RDSEM~1\Coal\Lab-01>
```