Faculty of Engineering South Eastern University of Sri Lanka	Course	BSc Eng (Hons)
	Semester	1
	Subject	CS 13001 Introduction to Computing

SEU/IS/...../EG/.....

Assignment – I

Time Allowed: 45 minutes

1. Write a programme that asks the user for a Celsius temperature converts it to (i) Kelvin temperature and (ii) Fahrenheit temperature. If the user inputs anything other than a valid numerical value, the programme should print an error message.

   Hint:

   $$Kelvin\ Temperature\ =\ Celsius\ Temperature\ +\ 273.15$$

   $$Fahrenheit\ Temperature\ =\ Celsius\ Temperature\ \times \frac{9}{5} +\ 32$$

   If the user inputs a correct temperature, your programme should run as follows:

```
Enter temperature in Celsius : 0

Temperature in Kelvin =  273.15
Temperature in Kelvin =  32.0
```

   If the user does not input a valid temperature, your programme should run as follows:

```
Enter temperature in Celsius : bingo

ERROR . . . Enter a valid numerical temperature value!
```

   Make sure that you add a newline in the appropriate place in your code to separate user input line and the results line(s).

   [30 Marks]

2. Write a program that asks the user for their test score and prints out the grade. Aside from avoiding text input from the user, the program should also exit with an error message if the test score is not valid – i.e. less than 0 or greater than 100. For a string input the programme should print one error message and for invalid scores a different error message. Study the sample executions correctly before coding the programme.

Score	Grade
>= 90	A
>= 80	B
>= 70	C
>= 60	D
< 60	Fail

```
Enter your score: 1000

Enter a score between 0 and 100!
```

```
Enter your score: -100

Enter a score between 0 and 100!
```

```
Enter your score: bingo

Enter a numeric value!
```

```
Enter your score: 59.91

Your grade is :  F
```

Make sure that you add a newline in the appropriate place in your code to separate user input line and the results line(s).

[70 Marks]