National University of Computer and Emerging Sciences, Karachi
Fall – 2021, FAST School of Computing
Mid Term Examination
9th November 2021, 11:30am – 1:00pm

Course Code:CL1002	Course Name: Programming Fundamentals
Instructor Name : Hamza Ahmed	
Student Roll No: 21K-4598	Section No: D

Instructions: PAPER AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

- Read each question completely before answering it. In case of any ambiguity, you may make assumptions. But your assumption should not contradict any statement in the question paper.
- Return the question paper.
- Create a folder in D-Drive of your student-id e.g. **"Folder Name should be K20-1292 and save all your .C file there.**
- Cheating in any case will lead to **F-GRADE** directly as per university rules.

Time: 90 min. **Max Marks 40 points**

Question # 01: 20points

Write a program that will perform Addition, Division and Multiplication of three numbers using the following
method:

- Input three numbers such as n1, n2 and n3.
- Add the smallest number with the second largest number.
- Now check the largest of the two numbers and perform the following operations.
  - Multiply the Smaller number by 2.
  - Divide the Largest number by 2.
  - Declare a variable total. Add to a total of only those multiples of the Smaller number which correspond to an even quotient of the larger number.

FOR EXAMPLE:
SAMPLE INPUT:
50 55 32
SAMPLE OUTPUT:
Now two numbers are
55,82

55 | 82
110 | 41
220 | 20
440 | 10
880 | 5
1760 | 2
3520 | 1

Then the total is 55+220+440+1760 = 2475

Question # 02: 10 points

Write a program that takes digits as an input and converts the digit in alphabetic order in reverse order.

e.g 12
output: two one

1234
Output: four three two one

Question 03: Use switch Statements 10 points

The Last Stop Boutique is having a five-day sale. Each day, starting on Monday, the price will drop 10% of the previous day's price. For example, if the original price of a product is $20.00, the sale price on Monday would be $18.00 (10% less than the original price). On Tuesday the sale price would be $16.20 (10% less than Monday). On Wednesday the sale price would be $14.58; on Thursday the sale price would be $13.12; and on Friday the sale price would be $11.81. Develop a solution that will calculate the price of an item for each of the five days, given the original price. Test the solution for an item costing $10.00.

Monday would be representing as 1

Tuesday would be representing as 2

Wednesday would be representing as 3

Thursday would be representing as 4

Friday would be representing as 5

Sample output:

```
C:\Users\hamza.ahmed.KHIFAST\Documents\Untitled1.exe
please enter the original Price
25.5
please enter the day
4
Thursday  16.730551
--------------------------------
Process exited after 12.3 seconds with return value 0
Press any key to continue . . .
```