**National University of Computer & Emerging Sciences, Karachi  
MID –Programming Fundamentals (Lab) CS-Department**Fast

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| **Course Code:** | **Course Name:** | |
| **Instructor Name: Aqsa Zahid** | | |
| **Student Roll No:** | | **Section No:** |

Instructions:

* Return the question paper.
* Read each question completely before answering it. In case of any ambiguity, you may make assumption. But your assumption should not contradict any statement in the question paper.
* All the answers must be solved according to the sequence given in the question paper.

**Time**: 120 minutes. **Max Marks 30 points**

**EACH QUESTION CARRY 10 POINTS**

**Question 01:**

Brand ABC 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 2000, the sale price on Monday would be 1800. On Tuesday the sale price would be 1620 and so on till the last day write a program that will calculate and print the price of an item for each of the five days, given the original price.

**Question 02:**

Write a C program in which take an integer number as input your work is to determine if the number is XNumber. XNumber is number if sum of the squares of digits of number till 1 takes less than 10 iteration

Eg 23: is xNumber because 2^2+3^2 = 13, 1^2+3^2=10, 1^2+0^2 = 1 (3 steps)

**Question 03:**

Write a program using a switch case that asks the user for any digit number then prints its English value for the number.

Keep in mind that your program should contain logic such that it can handle at least 3 digit numbers. **No hardcording allowed**.

Enter the number: 23

The English word is Twenty-three.