

## Department of Master of Computer Applications

### MCA11 Programming with Python

#### Laboratory Exercise – 2

1. A school has the following rules for grading system:
  - a. Below 25 - F
  - b. 25 to 45 - E
  - c. 45 to 50 - D
  - d. 50 to 60 - C
  - e. 60 to 80 - B
  - f. Above 80 - A
  - i) Ask user to enter marks and print the corresponding grade.
  - ii) A student will not be allowed to sit in exam if his/her attendance is less than 75%. Take following input from user: Number of classes held, Number of classes attended. And print percentage of class attended. Is student is allowed to sit in exam or not.
2. A toy vendor supplies three types of toys: Battery Based Toys, Key-based Toys, and Electrical Charging Based Toys. The vendor gives a discount of 10% on orders for battery-based toys if the order is for more than Rs. 1000. On orders of more than Rs. 100 for key-based toys, a discount of 5% is given, and a discount of 10% is given on orders for electrical charging based toys of value more than Rs. 500. Assume that the numeric codes 1,2 and 3 are used for battery based toys, key-based toys, and electrical charging based toys respectively. Write a program that reads the product code and the order amount and prints out the net amount that the customer is required to pay after the discount.
3. Write a program to do the following operations:  
Read any two positive integer numbers (say  $n_1$  &  $n_2$ ) and one-character type operator (say  $opr$ ). Note that  $opr$  is any mathematical operator. Depending upon the operator, do the appropriate operation. e. g. if  $opr$  is '+' then the display the value obtained by evaluating the expression  $(n_1 + n_2)$ .
4. A transport company charges the fare according to following table:

Distance	Charges
1-50	8 Rs./Km
51-100	10 Rs./Km
> 100	12 s/Km

Ask user to enter the distance and compute the fare.

5. Write a program to solve the quadratic equation.