



## University of Vavuniya

First Examination in Information Technology - 2019

First Semester-December 2020/January 2021

Held on October/November 2021

IT1134 Fundamentals of Programming (Practical)

Answer All Questions

Time Allowed: Three Hours

Handwritten notes in blue ink: 7/10, 5, 7/10, 5, 50, 20.

1. Write a program in C++ to print a given number in reverse order of its digits.

(e.g.: the reverse order of a given number 12345 is 54321).

[30%]

2. Write a program in C++ for a fruit store named A-Z Fruit Store to carry out its day-to-day operations according to the following requirements:

[70%]

- (a) The program should be able to give menu selection with an exit option to add fruits to the store. The user can select the fruit number, give the number of fruits to be purchased and the unit price of the fruit selected, as shown below:

*[This question is continued on the next page]*

-----Welcome to A-Z fruit Store-----  
To add fruits to the store, please select the fruit:

- 1.Apple
- 2.Orange
- 3.Mango
- 4.Pineapple
- 5.Lemon
- 6.Exit

1  
Enter number of apples:|  
500  
Enter Unit price of apple:  
50  
Do you want to add more items(y/n)?  
y

(b) The user should be able to add the following details of fruits in the store:

Fruit	Number of items	Unit Price
Apple	500	50.00
Orange	1000	60.00
Mango	1500	70.00
Pineapple	2000	80.00
Lemon	2500	10.00

(c) After the addition of fruit details in the stock, the program should display the initial stock details as shown below:

```
=====
Initial stock available at store:
Apple:500
Orange:1000
Mango:1500
Pineapple:2000
Lemon:2500
=====
```

*[This question is continued on the next page]*

- (d) The program should ask the user to add a purchasing order for a customer if the stock details are available.

Suppose that if a customer wants to place an order for 100 apples, the program should give the details as a menu to select the item with an exit option in the menu and then ask the number of selected fruits as given below:

To make the order, please select the fruit:

- 1.Apple
- 2.Orange
- 3.Mango
- 4.Pineapple
- 5.Lemon
- 6.Exit

1

Enter number of apples:

100

Do you want to add more items(y/n)?

y

- (e) The program should print the invoice for the order made by the customer after placing the order for 100 apples, 200 oranges, 300 mangoes, 400 pineapple and 500 lemons, as shown below:

=====Bill for the Order=====			
Item	No of Fruits	Unit Price	Price
Apple	100	Rs 50.00	Rs 5000.00
Orange	200	Rs 60.00	Rs 12000.00
Mango	300	Rs 70.00	Rs 21000.00
Pineapple	400	Rs 80.00	Rs 32000.00
Lemon	500	Rs 10.00	Rs 5000.00
Total: Rs 75000.00			

[This question is continued on the next page]

- (f) The program should display the available stock in the store, soon after the purchase has been completed, as shown below:

```
=====
Stock available at store now:
Apple:400
Orange:800
Mango:1200
Pineapple:1600
Lemon:2000
=====
```