



**Sri Lanka Institute of Information Technology**  
**B. Sc (Hons). Degree in IT**  
**Year 1 – Semester 1 – 2020 – September Intake**  
**Introduction To Programming ( IT1010)**  
**Online 1**  
**Version A**

**Time : 1 hour**

Hotel rates of ABC Hotels (Pvt) Ltd. for full board and half board basis for one day are given below.

Type of room	Amount (Rs)	
	Full board (F)	Half Board (H)
1	25555.00	17250.00
2	17500.00	12250.00
3	9000.00	7250.00

As a part of the promotional campaign, discounts will be given for their 'Gold' , 'Silver' 'Bronze' reward card holders as shown in the table below.

Card Type	Discount %
G	12.5
S	11.5
B	9.5

Write a C program to allow the user to enter the type of the room, accommodation type ( F- Board, H- Half Board ), number of days and the Card type ( G, S, B ) and calculate the amount need to be paid for the given no of days.

Your program should display an error message **"Invalid Type of room"** if the user inputs a wrong type for the room.

The program should allow the user to enter the orders until -1 is entered for the room type.

Format your output to two decimal places.

Sample Output:

```
Enter type of room : 2
Enter Accommodation Basis (F/H) : F
Enter No of days : 2
Enter Reward Card Type ( G, S, B ) : G
Amount(Rs.) : 30625.00
```

```
Enter type of room : -1
```

Save your program as **ITXXXXXX.c**





Sri Lanka Institute of Information Technology  
B. Sc Degree in IT/ISE/CSN  
Year 1 – Semester 1 – 2018 – June Intake  
Introduction To Programming (IT1010)  
Online 1  
Version B

Time : 1 hour

A company pays the salaries for their employees based on the number of hours they worked. The hourly rate for each employee category is given in the following table.

Employee Category	Hourly Rate (Rs.)
A	600.00
B	450.00
C	300.00

Write a C program to input the employee category and number of hours worked from the key board and calculate and display the salary. If the user input an invalid employee category, display an error message.

Next, calculate and display the tax amount paid by each employee according to the following criteria.

The tax is calculated as follows:

For salary below Rs.25000/-, no tax applies.

For salary Rs.25000/- and above, 2% tax applies.

For salary above Rs.50000/-, 4% tax applies.

After displaying the details for one employee, the program should ask from the user whether he/she wants to calculate the salary for more employees. If the user says "yes", the program should continue, otherwise terminate the program.

Sample output:

Employee category: A  
Number of hours : 100  
Salary : 60000.00  
Tax: 2400.00

Save your program as IP1B.c



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**Version C**

**Time : 1 ho**

Write a C program as given below to order pizzas from “Pizza Paradise”.

Pizza Option	Description	Charges per pizza ( LKR )		
		Personal Pizza (P)	Medium (M)	Large (L)
1	Italiano	560	920	1800
2	Cheesy Onion	340	660	1300
3	Hot Garlic Prawns	760	1100	2100

Topping Option	Extra Toppings	Charges per pizza ( LKR)
1	Cheese	320
2	Olives	140
3	Bell Pepper	130
4	Pineapple	150

Input the “Option”, the size of the Pizza ( P, M, L ) and the number of pizzas ordered user should be prompted to input extra toppings by displaying a message “Do you need toppings ?” If the user enters ‘y’ or ‘Y’ then the program should allow the user to input topping and calculate the total Price. The user should be prompted to add extra toppings enters ‘n’ or ‘N’ to stop. Then the program should terminate after printing the total price pizzas the user has ordered.

Your program should also display an error message if the user has entered an invalid option.

Save the program as **ITXXXXXX.c**

Sample output:

```
Input Pizza Option      : 3
Size of the Pizza ( P/M/L) : L
Number of Pizzas       : 2
Do you need any extra toppings ( y/n) : y
Input your option : 1
Do you need any extra toppings ( y/n) : y
Input your option : 2
Do you need any extra toppings ( y/n) : n
Total Price Rs : 5120.00
```





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**Time : 1 hour**

The following table provides the details of the different types of medical insurance schemes proposed by an Life insurance company

Insurance type	Description	Monthly premium per family	Monthly premium per individual
A	Arogya	5200.00	4500.00
N	Niduk	4300.00	3100.00
D	Digasiri	4800.00	3600.00
S	Suwawewa	3800.00	3300.00

Write a C program that prompt the user to input the insurance type, family or individual, number of children (if family) and display monthly instalment payable to the company.

Family unit consisting of Insured, spouse and 2 children only. For each additional child, 10% the family premium will be charged.

Your program should display an error message "Invalid Insurance Type" and terminate, if the user input a wrong insurance type, which is not listed in the table given above.

After displaying the total amount that need to be paid by the client, the program should prompt message "Do you want to continue". If the user inputs "y" or "Y" the program should ask the user to enter the details of the next item. If the user input "n" or "N" the program should terminate.

Format your output to 2 decimal places.

Save your program as *ITXXXXXX.c*

Sample output

```
Insurance Type : A
Family or Individual ( F- family and I - individual) : I
Total Amount : 4500.00
```

```
Insurance Type : N
Family or Individual ( F- family and I - individual) : F
Number of children : 3
Total Amount : 4730.00
```

```
Insurance Type : X
Invalid Insurance Type !
```

