

CSEB134 LAB TEST 1 QUESTIONS

Wednesday

GROUP 1

Write a complete C program that will help a company to adjust salary of its employees.

The program should:

- First request for the salary
- Then request for P - if Part-time, F - if Full-time

If the employee is working as Full-time, then increase 10% of the current salary and display the new salary where as if the employee is working as a Part -time, then the current salary remains.

You are required to use two new functions: getInput and processSalary in the program. So, use the getInput function to obtain input from user and the processSalary function to process the salary.

GROUP 2

Write a complete C program that will help a teacher to adjust marks of her students for their assignments. The program should:

- First request for the assignment marks
- Then request for Y - if submitted on time, N - if submitted late

If the students have submitted late, 5% from actual marks will be deducted and adjusted mark will be displayed whereas if the student submits on time, the assignment marks remains.

You are required to use two new functions: getValue and checkMarks in the program. So, use the getValue function to obtain input from user and the checkMarks function to process the marks.

Thursday

GROUP 1

Write a complete C program that will help the officer at theme park to give discount for children. The program should:

- First request for ticket price
- Then request for age

If the age is below 12 years, then give 5% off for the ticket and display the new ticket price. Otherwise, the ticket price remains.

You are required to use two new functions: `getValue` and `checkAge` in the program. So, use the `getValue` function to obtain input from user and the `checkAge` function to process the ticket price.

GROUP 2

Write a complete C program that will help a company to calculate overtime of its employees.

The program should:

- First request for the number of hours
- Then request for N - if night shift, D - if day shift

If the employee is working as night shift, give RM 5 for every hour otherwise give RM 3 for every hour. Calculate and display the total overtime the employee gets for both conditions.

You are required to use two new functions: `getInput` and `processOvertime` in the program. So, use the `getInput` function to obtain input from user and the `processOvertime` function to process the overtime.

Solution

```
#include<stdio.h>
```

```
void getInput();
```

```
void processSalary(float ,char );
```

```
void main()
```

```
{  
    getInput();  
}
```

```
void getInput()
```

```
{  
    float salary;  
    char status;  
  
    printf("Enter salary:");  
    scanf("%f",&salary);  
  
    printf("Enter employment status (P - Part-time, F - Full-time):");
```

```
    scanf(" %c",&status);

    processSalary(salary,status);
}

void processSalary(float salary,char status)
{

    float new_salary;

    if(status == 'f' || status == 'F')
    {
        new_salary = salary * 0.10 + salary;

        printf("Your new salary is %f",new_salary);
    }
    else if(status == 'p' || status == 'P')
    {
        printf("Your salary remains the same.");
    }
    else
    {
        printf("Invalid input.");
    }
}
```

CSEB134 LAB TEST 2 QUESTIONS

Wednesday

GROUP 1

Write a complete C program that helps to determine the greatest height (tallest figure) of n people. n is a non-negative value that needs to be obtained from the user.

GROUP 2

Write a complete C program that helps to determine the greatest weight (heaviest figure) of n people. n is a non-negative value that needs to be obtained from the user.

Solution

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
    int n, i, height, tallest = 0;  
    char option;
```

```
    do {
```

```
        printf("Enter a positive number: ");  
        scanf("%d",&n);
```

```
        for (i = 0; i < n; i++)
```

```
        {
```

```
            printf("Enter height: ");  
            scanf("%d",&height);
```

```
            if (height > tallest)  
                tallest = height;
```

```
        }
```

```
        printf("Tallest = %d", tallest);
```

```
        printf("\nPress 1 to continue, q to quit...\n");  
        scanf(" %c",&option);
```

```
    }while (option != 'q');
```

```
}
```

Thursday

GROUP 1

Write a complete C program that calculates and displays the average score of a series of scores entered by the user. The program should display the average score when user enters a negative value.

GROUP 2

Write a complete C program that calculates and displays the average weight of a series of weights entered by the user. The program should display the average weight when user enters a negative value.

Solution

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
    float score, average, sum = 0, counter = 0;
```

```
    int i = 0;
```

```
    char option;
```

```
    do {
```

```
        do {
```

```
            printf("Enter score %d: ", i+1);
```

```
            scanf("%f",&score);
```

```
            if (score > 0)
```

```
            {
```

```
                sum = sum + score;
```

```
            }
```

```
            counter++;
```

```
            i++;
```

```
        }while (score > 0);
```

```
        average = sum/(counter - 1);
```

```
        printf("Average score = %f", average);
```

```
        i = 0, sum = 0, counter = 0;;
```

```
        printf("\n\nPress 1 to continue, e to exit...\n");
```

```
        scanf(" %c",&option);
```

```
}while (option != 'e');  
}
```