CSE 114 STRUCTURED PROGRAMMING LANGUAGE LAB

LAB 3

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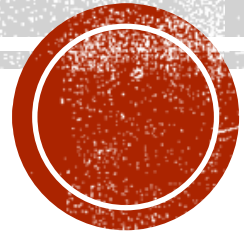
NEUB



OBJECTIVE

- To understand the programming knowledge using Decision Statements (if, if-else, if-else if)

PROBLEM STATEMENT

- Write a program to take input of name, rollno and marks obtained by a student in 5 subjects (cse113, cse114, mat101, phy102, eng202) each have its 100 full marks and display the average marks and letter grade [A+ (marks above or equal 80), A (marks between 60 to 79), B (marks between 50 to 59), C (marks between 40 to 49), D (marks between 33 to 39), F (marks less than 33)]

INPUT & OUTPUT

Enter Name of Student: Asma Zaman

Roll Number: 10

Enter marks of 5 Subjects:

CSE113: 65

CSE114: 75

MAT101: 56

PHY102: 62.5

ENG202: 80

Name of Student: Asma Zaman

Roll Number: 63

Average marks: 67.7

Letter Grade: A

```c
#include<stdio.h>
int main(){
    char name[20], grade;
    int roll;
    float sub1, sub2, sub3, sub4, sub5, avg;

    printf("Enter Name of the Student: ");
    scanf("%[^\n]", name);
    printf ("Roll Number: ");
    scanf("%d", &roll);

    printf ("Enter Marks of 5 Subjects:\n");
    printf("CSE113: ");
    scanf("%f", &sub1);
    printf("CSE114: ");
    scanf("%f", &sub2);
    printf("MAT101: ");
    scanf("%f", &sub3);
    printf("PHY102: ");
    scanf("%f", &sub4);
    printf("ENG202: ");
    scanf("%f", &sub

    avg = sub1+sub2+sub3+sub4+sub5;
    avg /= 5;
    printf("\nName of Student: %s", name);
    printf("\nRoll Number: %d", roll);
    printf ("\nAverage marks: %2.2f", avg);
    printf ("\nLetter Grade: ", avg);

    if(avg>=80)
        printf("A+");
    else if(avg>=60 && avg<=79)
        printf("A");
    else if(avg>=50 && avg<=59)
        printf("B");
    else if(avg>=40 && avg<=49)
        printf("C");
    else if(avg>=33 && avg<=39)
        printf("D");
    else
        printf("F");

    printf("\n")

    return 0;
}
```

LAB EXERCISES

1. Write a program to check whether an input character is vowel or consonant.
2. Write a program to take a number as input and check whether the number is multiple of 3 and divisible by 5 or 7
3. Write a program to take a number (two or higher digit integer number) as input and shows it in reverse order.
4. Write a program to check whether the entered year is leap year or not (a year is leap if it is divisible by 4 and divisible by 100 or 400.)