**LAB Week 2:**

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**Reg#:SP21-BSE-008**

**Question 1:** Write a C program to find maximum between two numbers using if else. The program will take two numbers from user and find maximum between two numbers using if else.

Solution No 1

**#include<stdio.h>**

**int main()**

**{**

**int a;**

**int b;**

**printf("Enter the number a=");**

**scanf("%d",&a);**

**printf("Enter the number b=");**

**scanf("%d",&b);**

**if(a>b)**

**{**

**printf("%d is greater",a);**

**}**

**else**

**{**

**printf("%d is greater",b);**

**}**

**return 0;**

**}**

**Question 2:** Write a C program to find maximum between three numbers using if else. The program will take three numbers from user and find maximum between three numbers using if else.

Solution No 2:

**#include<stdio.h>**

**int main()**

**{**

**int a;**

**int b;**

**int c;**

**printf("Enter the number a=");**

**scanf("%d",&a);**

**printf("Enter the number b=");**

**scanf("%d",&b);**

**printf("Enter the number c=");**

**scanf("%d",&c);**

**if(a>b)**

**{**

**printf("%d is greater",a);**

**}**

**else if(b>a)**

**{**

**printf("%d is greater",b);**

**}**

**else**

**{**

**printf("%d is greater",c);**

**}**

**return 0;**

**}**

**Question 3:** Write a C program to input any number from user and check whether the given number is positive, negative or zero.

Solution No 3:

**#include<stdio.h>**

**int main()**

**{**

**int a;**

**printf("Enter the value of a=");**

**scanf("%d",&a);**

**if(a>0)**

**{**

**printf("%d is positive",a);**

**}**

**else if(a<0)**

**{**

**printf("%d is negative",a);**

**}**

**else**

**{**

**printf("%d is equal to 0",a);**

**}**

**return 0;**

**}**

**Question 4:** Write a C Program to input a character from user and check whether it is vowel or consonant.

Solution No 4:

**#include<stdio.h>**

**int main()**

**{**

**char alpha;**

**printf("Enter the alpha");**

**scanf("%c",&alpha);**

**if(alpha=='a'|| alpha=='e'|| alpha=='i'|| alpha=='o'|| alpha=='u'||**

**alpha=='A'|| alpha=='E'|| alpha=='I'|| alpha=='O'|| alpha=='U')**

**{**

**printf("'%c' is vowel,alpha");**

**}**

**else**

**{**

**printf("'%c'is consonant,alpha");**

**}**

**return 0;**

**}**

**Question 5:** Write a C program to input month number and print number of days in that month.

Solution No 5:

**#include <stdio.h>**

**int main()**

**{**

**int month;**

**printf("Enter month number (1-12)");**

**scanf("%d", &month);**

**if(month==1 || month==3 || month==5 || month==7 || month==8 || month==10 || month==12)**

**{**

**printf("31 days");**

**}**

**else if(month==4 || month==6 || month==9 || month==11)**

**{**

**printf("30 days");**

**}**

**else if(month==2)**

**{**

**printf("28 or 29 days");**

**}**

**else**

**{**

**printf("Invalid input ");**

**}**

**return 0;**

**}**

**Question 6:** C program to check whether a character is Uppercase or Lowercase.

Solution No 6:

**#include <stdio.h>**

**int main()**

**{**

**char alpha;**

**printf("Enter any character");**

**scanf("%c", &alpha);**

**if(alpha >= 'A' && alpha <= 'Z')**

**{**

**printf("'%c' is uppercase alphabet", alpha);**

**}**

**else if(alpha >= 'a' && alpha <= 'z')**

**{**

**printf("'%c' is lowercase alphabet", alpha);**

**}**

**else**

**{**

**printf("'%c' is not an alphabet", alpha);**

**}**

**return 0;**

**}**

**Question 7:** Write a C program to input electricity unit charges and calculate total electricity bill according to the given condition:

For first 50 units Rs. 0.50/unit

For next 100 units Rs. 0.75/unit

For next 100 units Rs. 1.20/unit

For unit above 250 Rs. 1.50/unit

An additional surcharge of 20% is added to the bill

Solution:

#include<stdio.h>

int main()

{

float unit, charges, bill,surcharges,Total\_bill;

printf("Enter the unit used:\n");

scanf("%f",&unit);

if(unit<50)

{

charges=0.50;

bill=unit\*charges;

printf("Bill is %.2f\n",bill);

surcharges=bill\*0.2;

Total\_bill=bill-surcharges;

printf("The Total bill is %.2f\n",Total\_bill);

}

else if(unit>51&&unit<150)

{

charges=0.75;

bill=unit\*charges;

printf("Bill is %.2f\n",bill);

surcharges=bill\*0.2;

Total\_bill=bill-surcharges;

printf("The Total bill is %.2f\n",Total\_bill);

}

else if(unit>151&&unit<250)

{

charges=1.20;

bill=unit\*charges;

printf("Bill is %.2f\n",bill);

surcharges=bill\*0.2;

Total\_bill=bill-surcharges;

printf("The Total bill is %.2f\n",Total\_bill);

}

else if(unit>250)

{

charges=1.50;

bill=unit\*charges;

printf("Bill is %.2f\n",bill);

surcharges=bill\*0.2;

Total\_bill=bill-surcharges;

printf("The Total bill is %.2f\n",Total\_bill);

}

}