

Q1) Write a menu driven C Program to design a simple calculator which solves 10 operations -
 4 Arithmetic, 4 Relational and any two of your choice. The program should loop till the user wishes to stop.

```
#include <stdio.h>
int main()
{
    int n, i;
    int a, b, result;
    char option;
    for (i = 1; i != 0; i++)
    {
        printf("Enter 1 for addition\n");
        printf("Enter 2 for subtraction\n");
        printf("Enter 3 for multiplication\n");
        printf("Enter 4 for division\n");
        printf("Enter 5 for less than\n");
        printf("Enter 6 for greater than\n");
        printf("Enter 7 for lesser than or equal to\n");
        printf("Enter 8 for greater than or equal to\n");
        printf("Enter 9 for equal to\n");
        printf("Enter 10 for modulus\n");
        printf(">>\n");
        scanf("%d", &n);
        printf("Enter 1st Numbers\n");
        scanf("%d", &a);
        printf("Enter 2nd Numbers\n");
        scanf("%d", &b);
```



```
switch (n) {
```

```
    case 1:
```

```
        result = (a + b);
```

```
        printf("The result is %d", result);
```

```
        break;
```

```
    case 2:
```

```
        result = (a - b);
```

```
        printf("The result is %d", result);
```

```
        break;
```

```
    case 3:
```

```
        result = (a * b);
```

```
        printf("The result is %d", result);
```

```
        break;
```

```
    case 4:
```

```
        result = (a / b);
```

```
        printf("The result is %d", result);
```

```
        break;
```

```
    case 5:
```

```
        result = (a < b);
```

```
        printf("The result is %d", result);
```

```
        break;
```

```
    case 6:
```

```
        result = (a <= b);
```

```
        printf("The result is %d", result);
```

```
        break;
```

```
    case 7:
```

```
        result = (a <= b);
```

```
        printf("The result is %d", result);
```

```
        break;
```

```
    case 8:
```

```
        result = (a >= b);
```

```
printf ("The result is %.d ", result);  
break;
```

Case 9 :

```
result = (a == b);  
printf ("The result is %.d ", result);  
break;
```

Case 10 :

```
result = (a % b);  
printf ("The result is %.d ", result);  
break;
```

default :

```
printf ("The result innvalid \n");  
break;
```

```
}
```

```
printf ("\n if you want to continue then enter yes \n");  
scanf ("%s", &option);  
getch();
```

```
if (option != "yes" || option != "Yes")  
i = 0;
```

```
{  
getch();  
return 0;
```

```
}
```


OUTPUT :

Enter 1 for addition
Enter 2 for subtraction
Enter 3 for multiplication
Enter 4 for division
Enter 5 for less than
Enter 6 for greater than
Enter 7 for lesser than or equal to
Enter 8 for greater than or equal to
Enter 9 for equal to
Enter 10 for modulus

~~Enter 10~~

Enter 1st number

14

enter 2nd number

6

The result is 2

if you want to continue then enter yes

Q2) Write a C program to accept three numbers from the user. Find the greater two among the three and pass them as parameters to the user defined functions given below.

a) `sumaver(...)` which finds the sum and average of two numbers. Print the sum and return the average

b) `printeven(...)` which prints all the even numbers between the given two numbers

```
#include <stdio.h>
float sumaver(int m, int n)
{
    float avg = 0; int sum = 0;
    sum = (m+n);
    avg = (sum)/2;
    printf("Sum is: %d \n", sum);
    return avg;
}

void printeven(int m, int n)
{
    int i;
    printf("Even numbers are: \n");
    for (i = n; i < m; i++)
    {
        if (i % 2 == 0)
        {
            printf("%d ", i);
        }
    }
}
```




```
void main()
{
    int a, b, c, m, n;
    printf("Enter the any 3 number: ");
    scanf("%d %d %d", &a, &b, &c);
    m = a; if (a > b && a > c)
    if (a > b && b m = a;
        if (b > a && b > c)
            m = b;
        else
            m = c;
        if (a == m)
        {
            if (b > c)
                n = b;
            else
                n = c;
        }
        if (b == m)
        {
            if (a > c)
                n = a;
            else
                n = c;
        }
        if (c == m)
        {
            if (a > b)
                n = a;
            else
                n = b;
        }
    }
```

```
printf("Average is : %.1f\n", sum/aver(m,n));
```

```
printeven(m,n);
```

```
}
```

OUTPUT :

Enter the any 3 number : 20 40 30

Sum is : 70

Average is : 35.0

Even numbers are :

30 32 34 36 38