

1. Write a menu driven c program to design a simple calculator which saves 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>
```

```
#include <math.h>
```

```
void main()
```

```
{
```

```
int n1, n2, choice;
```

```
char ch;
```

```
do
```

```
{
```

```
printf("\n select your choice from the options  
given below : \n");
```

```
printf("\n ARITHMETIC OPERATIONS : \n
```

```
1-Addition \n 2-Subtraction \n
```

```
3-Multiplication \n 4-Division \n \n
```

```
RELATIONAL OPERATIONS : \n
```

```
5-Equal to \n 6-Greater than \n
```

```
7-Lesser than \n 8-not equal to \n \n
```

```
9-Perimeter of rectangle \n
```

```
10-Power \n");
```

```
scanf("%d", &choice);
```

```
printf("Enter the first number: ");
```

```
scanf("%d", &n1);
```

```
printf("Enter the second number: ");
```

```
scanf("%d", &n2);
```

```
switch(choice)
```

```
{
```

```
case 1:
```

```
printf("\n Addition of %d and %d is %d\n",  
n1, n2, n1+n2);
```

```
break;
```

```
case 2:
```

```
printf("\n Subtraction of %d and %d is %d\n",  
n1, n2, n1-n2);
```

```
break;
```

```
case 3:
```

```
printf("\n Multiplication of %d and %d is %d\n",  
n1, n2, n1*n2);
```

```
break;
```

```
case 4:
```

```
printf("\n Division of %d and %d is %d\n",  
n1, n2, n1/n2);
```

```
break;
```



Case 5:

if( $n1 == n2$ )

printf("Both the numbers are equal");

else

printf("Both the numbers are not equal");

break;

Case 6:

if( $n1 > n2$ )

printf("%d is greater than %d",  $n1, n2$ );

else

printf("%d is greater than %d",  $n2, n1$ );

break;

Case 7:

if( $n1 < n2$ )

printf("%d is lesser than %d",  $n1, n2$ );

else

printf("%d is lesser than %d",  $n2, n1$ );

break;

Case 8:

if( $n1 != n2$ )

printf("In Both are not equal");

else

printf("In Both are equal");

break;

case 9:

```
printf("Perimeter of rectangle having length  
%.d and breadth %.d is %.d\n", n1, n2,  
2*(l+b));
```

break;

case 10:

```
printf("%.d to the power of %.d is %.d", n1, n2,  
Pow(n1, n2));
```

break;

default:

```
printf("Enter correct choice\n");
```

break; }

```
printf("Enter x to continue");
```

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

```
}
```

```
while (ch == 'x' || ch == 'X');
```

```
}
```

2.

```
#include <stdio.h>
int sumaver (int num1, int num2)
{
    float sum = 0, avg;
    sum = num1 + num2;
    avg = sum / 2;
    printf("In sum of two numbers is %.f\n", sum);
    return avg;
}
int printeven (int num3, int num4)
{
    int x = num3 + 1, arr[10];
    printf("In Even numbers are: ");
    while(x < num4)
    {
        if(x % 2 == 0)
            printf("%d\t", x);
        ++x;
    }
}
int main()
{
    int num[3], i, j, temp, s, p;
    printf("Enter three numbers: \n");
    scanf("%d %d %d", &num[0], &num[1], &num[2]);
    for(i = 1; i < 4; i++)
```



```
{  
    if (num[i] > num[j])
```

```
{  
    temp = num[i];  
    num[i] = num[j];  
    num[j] = temp;
```

```
}
```

```
}
```

```
}
```

```
s = sumaver (num[2], num[3]);
```

```
p = Printeven (num[2], num[3]);
```

```
printf ("ln Avelage : %.2f\n", s);
```

```
return 0;
```

```
}
```