

1. 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>
#include<math.h>
float fac(int n)
{
    int i;
    float fac1=1;
    for(i=n;i>0;i--)
    {
        fac1*=i;
    }
    return fac1;
}
int main()
{
    char c1;
    int n1,n2,c2,Pow;
    do
    {
        printf("\n1.Add\n2.Subtract\n3.Multiply\n4.Divide\n5.Greater than(>)\n6.Lesser
than(<)\n7.Not Equal(!=)\n8.Equal(==)\n9.Factorial\n10.Power(n1^n2)\n\n");
        scanf("%d",&c2);
        switch(c2)
        {
            case 1: printf("Enter the 2 numbers\n");
                    scanf("%d%d",&n1,&n2);
                    printf("Result is: %d",n1+n2);
                    break;

            case 2: printf("Enter the 2 numbers\n");
                    scanf("%d%d",&n1,&n2);
```

```
printf("Result is: %d",n1-n2);  
break;
```

```
case 3: printf("Enter the 2 numbers\n");  
scanf("%d%d",&n1,&n2);  
printf("Result is: %d",n1*n2);  
break;
```

```
case 4: printf("Enter the 2 numbers\n");  
scanf("%d%d",&n1,&n2);  
printf("Result is: %f",(n1/(float)n2));  
break;
```

```
case 5: printf("Enter the 2 numbers\n");  
scanf("%d%d",&n1,&n2);  
if(n1>n2)  
printf("%d greater than %d",n1,n2);  
else  
printf("%d not greater than %d",n1,n2);  
break;
```

```
case 6: printf("Enter the 2 numbers\n");  
scanf("%d%d",&n1,&n2);  
if(n1<n2)  
printf("%d lesser than %d",n1,n2);  
else  
printf("%d not lesser than %d",n1,n2);  
break;
```

```
case 7: printf("Enter the 2 numbers\n");  
scanf("%d%d",&n1,&n2);
```

```
if(n1!=n2)

printf("%d not equal %d",n1,n2);

else

printf("%d equal to %d",n1,n2);


break;
```

```
case 8: printf("Enter the 2 numbers\n");

scanf("%d%d",&n1,&n2);

if(n1==n2)

printf("%d equal to %d",n1,n2);

else

printf("%d not equal to %d",n1,n2);

break;
```

```
case 9: printf("Enter the number\n");

scanf("%d",&n1);

printf("Factorial is: %f",fac(n1));

break;
```

```
case 10:printf("Enter the number and the power to be raised\n");

scanf("%d%d",&n1,&n2);

Pow=pow(n1,n2);

printf("Result is: %d",Pow);

break;
```

```
default: printf("Invalid Choice\n");
```

```
}
```

```
printf("\nDo you want to continue?(y=yes else any character)\n");fflush(stdin);
```

```
scanf("%c",&c1);
```

```
}while(c1=='y' || c1=='Y');  
  
return 0;  
  
}
```

```
1.Add  
2.Subtract  
3.Multiply  
4.Divide  
5.Greater than(>>  
6.Lesser than(<<  
7.Not Equal(!=)  
8.Equal(==)  
9.Factorial  
10.Power(n1^n2)  
  
9  
Enter the number  
5  
Factorial is: 120.000000  
Do you want to continue?(y=yes else any character)  
y  
  
1.Add  
2.Subtract  
3.Multiply  
4.Divide  
5.Greater than(>>  
6.Lesser than(<<  
7.Not Equal(!=)  
8.Equal(==)  
9.Factorial  
10.Power(n1^n2)  
  
8  
Enter the 2 numbers  
2  
2  
2 equal to 2  
Do you want to continue?(y=yes else any character)  
y  
  
1.Add  
2.Subtract  
3.Multiply  
4.Divide  
5.Greater than(>>  
6.Lesser than(<<  
7.Not Equal(!=)  
8.Equal(==)  
9.Factorial  
10.Power(n1^n2)  
  
10  
Enter the number and the power to be raised  
5  
2  
Result is: 25  
Do you want to continue?(y=yes else any character)  
n  
  
-----  
Process exited after 26.27 seconds with return value 0  
Press any key to continue . . .
```