

## Practice Assignments

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 prog should loop till the user wishes to stop

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int a, b, n, x;
```

```
    printf("Enter two numbers: \n");
```

```
    scanf("%d %d", &a, &b);
```

```
    while (true)
```

```
    {
```

```
        printf("Enter a number from 1-10");
```

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

```
        switch(n)
```

```
        {
```

```
            case 1:
```

```
                printf("sum = %d", (a+b));
```

```
                break;
```

```
            case 2:
```

```
                printf("diff = %d", (a-b));
```

```
                break;
```

```
            case 3:
```

```
                printf("prod = %d", (a*b));
```

```
                break;
```

```
            case 4:
```

```
                printf("remainder = %d", (a/b));
```

```
                break;
```

```
case 5: if (a > b)
    printf("1.d is greater than 1.d",
           a, b);
```

```
else
    printf("1.d smaller than 1.d", a, b);
break;
```

```
case 6: if (a == b)
    printf("1st numbers are equal");
else
```

```
    printf("numbers are not equal");
```

```
case 7: if (a < b)
```

```
    printf("1.d smaller than 1.d", a, b);
else
```

```
    printf("1.d greater than 1.d", a, b);
break;
```

```
case 8: if (a != b)
```

```
    printf("numbers are not equal");
else
```

```
    printf("numbers are equal");
break;
```

```
default :
```

```
    printf("Invalid choice");
```

```
}
```

```
printf("Enter 0 to exit & 1 to continue");
scanf("1.d", &x);
```

```
if (x == 0)
```

```
    break;
```

```
}
```

```
return 0;
```

```
}
```