

Week [1]

IBM 19 CS 200  
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Program 1:

```
#include <stdio.h>
int main()
{
    int i, a, b, c;
    int sum, diff, null, mod;
    float divi;
    while (1)
    {
        printf (" Choose operation you wish to do: \n");
        printf (" 1. Add \n");
        printf (" 2. Subtract \n");
        printf (" 3. Multiply \n");
        printf (" 4. Division \n");
        printf (" 5. Modulus \n");
        printf (" 6. Greater than \n");
        printf (" 7. Lesser than \n");
        printf (" 8. Not equal \n");
        printf (" 9. Equal to \n");
        printf (" 10. Increment by 5 \n");
        scanf ("%d", &i);
        printf (" Enter two numbers to perform the operation: \n");
        scanf ("%d %d", &a, &b);
        sum = a + b;
        diff = a - b;
        mul = (a * b);
```

```
divi = (a * 1) / b;  
mod = a % b;
```

```
switch (i)
```

```
{
```

```
case 1: printf("Sum = %.d \n", sum);  
break;
```

```
case 2: printf("Difference = %.d \n", diff);  
break;
```

```
case 3: printf("Multiplication = %.d \n", mul);  
break;
```

```
case 4: printf("Division = %.f \n", divi);  
break;
```

```
case 5: printf("Modulus = %.d \n", mod);  
break;
```

```
case 6: if (a > b)
```

```
{
```

```
printf("%.d > %.d \n", a, b);
```

```
}
```

```
else
```

```
{
```

```
printf("%.d > %.d \n", b, a);
```

```
}
```

```
break;
```

```

case 7: if (a < b)
    {
        printf("%d < %d\n", a, b);
    }
    else
    {
        printf("%d < %d\n", b, a);
    }
    break;

```

```

case 8: if (a != b)
    {
        printf("%d != %d\n", a, b);
    }
    else if
    {
        printf("%d != %d\n", b, a);
    }
    break;

```

```

case 9: if (a == b)
    {
        printf("%d = %d\n", a, b);
    }
    else if
    {
        printf("%d = %d\n", b, a);
    }
    break;

```



case 10 : printf("Incremented value is %n", a, a+5);  
printf("Incremented value is %n", b, b+5);  
break;

default : printf("Wrong choice");

printf("Press 1 to calculate more  
on Press any key to exit %n");  
scanf("%d", &c);

if (c == 1)

{

break;

}

}

}

Output

1. Add
2. Subtract
3. Multiply
4. Divide
5. Modules
6. Greater than
7. Lesser than
8. Not equal
9. Equal
10. Increment by 5

7  
two number to perform the operation  
9  
3  
 $3 < 9$

## Program 2

```
#include <stdio.h>
int sumover(int a, int b)
{
    int sum;
    sum = a + b;
    printf ("Sum = %d\n", sum);
    return sum/2;
}
```

```
void printeven(int a, int b)
{
    int small, big;
    if (a > b)
    {
        small = b;
        big = a;
    }
    else
    {
        small = a;
        big = b;
    }
}
```

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

```
int i;  
for (i = small + 1; i < big; i++)
```

```
{  
    if (i % 2 == 0)  
        printf("%d\n", i);  
}
```

```
}
```

```
int main()
```

```
{  
    int a, b, c, aug, n1, n2;  
    printf("Enter three numbers\n");  
    scanf("%d %d %d", &a, &b, &c);
```

```
    if (c > a && c < b)
```

```
    {  
        n1 = a;
```

```
        n2 = b;
```

```
    }  
    else if (b < a && b < c)
```

```
    {  
        n1 = a;
```

```
        n2 = c;
```

```
    }
```

```
    else
```

```
    {
```

```
        n1 = b;
```

```
        n2 = c;
```

```
    }
```



```
avg = sumover(n1, n2)
printf("Avg of two numbers is : %d\n", avg);
printf("Even numbers between the two are : ");
}
```

Output

Enter three numbers :

3

6

1

Sum = 9

Avg of two numbers is 4

Even ~~are~~ numbers between the two are - 4