1.Write a C program to demonstrate working of logical operator.

Answer -

**INPUT -**

//Write a C program to demonstrate working of relational operator

#include <stdio.h>

int main()

{

int a = 9;

int b = 4;

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

printf("a >= b: %d \n", a >= b);

printf("a <= b: %d \n", a <= b);

printf("a < b: %d \n", a < b);

printf("a == b: %d \n", a == b);

printf("a != b: %d \n",a!=b);

}

**OUTPUT -**

a > b: 1

a >= b: 1

a <= b: 0

a < b: 0

a == b: 0

a != b: 1   
  
  
  
  
**ABHINAV ANAND  
22052611  
B-16  
C LAB ASSIGNMENT**

2.Write a C program, input 2 integers and implement increment and decrement operator over them.

Answer -

**INPUT -**

//Q2)Write a program, input 2 integers and implement increment and decrement operator over them

#include <stdio.h>

void main() {

int a , b ;

printf("Enter value of a :");

scanf("%d",&a);

printf("Enter value of b :");

scanf("%d",&b);

printf("%d\n", a++);

printf("%d\n",++b);

}

**OUTPUT -**

Enter value of a :34

Enter value of b :32

34

33

**ABHINAV ANAND  
22052611  
B-16  
C LAB ASSIGNMENT**

3.Write a program, find discriminant of a quadratic equation and check the nature of the root.

Answer -

**INPUT -**

//Write a program, find discriminant of a quadratic equation and check the nature of the root

#include<stdio.h>

void main(){

int d,a,b,c;

printf("Enter coefficient of x^2: ");

scanf("%d",&a);

printf("Enter coefficient of x: ");

scanf("%d",&b);

printf("Enter the value of c: ");

scanf("%d",&c);

d=(b\*b)-(4\*a\*c);

printf("The discriminant is %d\n", d);

d>=0 ? printf("Real roots") : printf("Virtual Roots");

}

**OUTPUT -**

Enter coefficient of x^2: 4

Enter coefficient of x: 5

Enter the value of c: 4

The discriminant is -39

Virtual Roots

**ABHINAV ANAND  
22052611  
B-16  
C LAB ASSIGNMENT**

4.Write a C program to find P(2)+P(3). Let p(x) is a polynomial P(x)=2x^2-5x+1.

Answer -

**INPUT -**

#include<stdio.h>

//Write a C program to find P(2)+P(3). Let p(x) is a polynomial P(x)=2x^2-5x+1.

int main() {

int x,y;

int a = (x \* x \* 2) - (5 \* x) + 1;

int b = (y \* y \* 2) - (5 \* y) + 1;

int c = a + b;

printf("Type the value of x in p(x) - \n");

scanf("%d", &x );

printf("Type the value of y in p(y) - \n");

scanf("%d", &y );

printf("The value of p(x) + p (y) = %d", c);

return 0;

}

**OUTPUT -**

Type the value of x in p(x) -

1

Type the value of y in p(y) -

2

The value of p(x) + p (y) = 51188877

**ABHINAV ANAND  
22052611  
B-16  
C LAB ASSIGNMENT**

5.Write a C program to find the ASCII value of D.

Answer -

**INPUT -**

//Find the ASCII value of D.

#include <stdio.h>

void main() {

char c;

printf("Enter a character: ");

scanf("%c", &c);

printf("ASCII value of %c=%d",c,c);

}

**OUTPUT -**

Enter a character: 34

ASCII value of 3=51

**ABHINAV ANAND  
22052611  
B-16  
C LAB ASSIGNMENT**

6.Write a C program to display the digits of a three digit number and also find their sum.

Answer -

**INPUT -**

//Display the digits present in 3 digit number and find the sum of all digit

#include<stdio.h>

void main()

{

int num,a,b,c,sum;

printf("Enter The Number \n");

scanf("%d",&num);

a=num%10;

b=(num/10)%10;

c=(num/100)%10;

printf("Digits of the Number %d %d %d \n",c,b,a);

sum=a+b+c;

printf("Sum of the Digits %d \n",sum);

}

**OUTPUT -**

23

Digits of the Number 0 2 3

Sum of the Digits 5

**ABHINAV ANAND  
22052611  
B-16  
C LAB ASSIGNMENT**

7.Write a C program to check the number is positive or negative using ternary/conditional operator.

Answer -

**INPUT -**

//Check the number is postive or negative in ternary operator

#include<stdio.h>

void main()

{

int a,b;

printf("Enter The Number \n");

scanf("%d",&a);

(a > 0) ? printf("Number Is Positive \n"): printf("Number Is Negative \n");

}

**OUTPUT -**

Enter The Number

34

Number Is Positive

**ABHINAV ANAND  
22052611  
B-16  
C LAB ASSIGNMENT**

8.Write a C program to check the number is even or odd using ternary/conditional operator.

Answer -

**INPUT -**

//Check the number is even or odd using terniary operator

#include<stdio.h>

void main()

{

int a,b;

printf("Enter The Number \n");

scanf("%d",&a);

(a % 2 == 0) ? printf("Number Is Even \n"): printf("Number Is Odd \n");

}

**OUTPUT -**

Enter The Number

23

Number Is Odd

**ABHINAV ANAND  
22052611  
B-16  
C LAB ASSIGNMENT**

9.Write a C program. R1 & R2 in parallel and R3 in series. Input the values and find equivalent Resistance. R1=5 , R2 = 5 and R3 = 3 ohm.

Answer -

**INPUT -**

//R1 & R2 IN Parallel where as R3 in series find the resultant resistance

#include<stdio.h>

void main()

{

float R1,R2,R3;

float R;

printf("Enter The Value of R1 which in parallel \n");

scanf("%f",&R1);

printf("Enter The Value of R2 which in parallel \n");

scanf("%f",&R2);

printf("Enter The Value of R3 which in series \n");

scanf("%f",&R3);

R=(1/R1)+(1/R2);

R=(1/R)+R3;

printf("Resultant Resistance %f",R);

}

**OUTPUT -**

Enter The Value of R1 which in parallel

5

Enter The Value of R2 which in parallel

5

Enter The Value of R3 which in series

3

Resultant Resistance 5.500000  
  
**ABHINAV ANAND  
22052611  
B-16**