**QUESTION 1**

#include<stdio.h>

int main()

{

int a ;

printf("Enter the age of the person: ");

scanf("%d",&a);

if (a>=18)

{

printf("Eligible for voting");

}

else

{

printf("Not eligible for voting\n");

}

return 0;

}

**OUTPUT**

Enter the age of the person: 24

Eligible for voting

**TERNARY OPERATOR METHOD**

#include<stdio.h>

int main()

{

int age,eligible;

printf("enter your age:");

scanf("%d",&age);

eligible=(age>18)?(printf("you are eligible to vote")):(printf("You are not eligible to vote"));

}

**OUTPUT**

enter your age:25

you are eligible to vote

**QUESTION 2**

#include<stdio.h>

int main()

{

int a,b;

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

scanf("%d\n%d", &a, &b);

if(a>=0&&b>=0)

{

if(a>b)

printf("%d is greater", a);

else

printf("%d is greater", b);

return 0;

}

else

printf("Invalid Number");

return 0;

}

**TEST CASE 1 OUTPUT**

Enter two numbers:

156

345

345 is greater

**TEST CASE 2 OUTPUT**

Enter two numbers:

253

-34

Invalid Number

**LARGEST OF 3 NUMBERS**

#include<stdio.h>

int main()

{

int a,b,c,l;

printf("Enter three numbers:\n");

scanf("%d\n%d\n%d", &a, &b, &c);

if(a>=0&&b>=0&&c>=0)

{

l=(a>b)?(a>c?a:c):(b>c?b:c);

printf("The largest is:%d\n", l);

}

else

printf("Invalid Number");

return 0;

}

**TEST CASE 3 OUTPUT**

Enter three numbers:

254

456

123

The largest is:456

**TEST CASE 4 OUTPUT**

Enter three numbers:

244

244

244

The largest is:244

**TEST CASE 5 OUTPUT**

Enter three numbers:

123

-32

456

Invalid Number

**QUESTION 3**

#include <stdio.h>

#include<stdlib.h>

int main()

{

char ch;

int num1,num2;

printf("Choose the operator(+,-,,/,%%): ");

scanf("%c",&ch);

printf("Enter two numbers: ");

scanf("%d %d",&num1,&num2);

switch(ch)

{

case '+':

printf("%d + %d =\t%d\n",num1,num2,num1+num2);

break;

case '-':

printf("%d - %d =\t%d\n",num1,num2,num1-num2);

break;

case '':

printf("%d \* %d =\t%d\n",num1,num2,num1\*num2);

break;

case '/':

if(num2==0)

{

printf("denominator cannot be 0");

exit(0);

}

printf("%d / %d =\t%d\n",num1,num2,num1/num2);

break;

case '%':

if(num2==0)

{

printf("denominator cannot be 0");

exit(0);

}

printf("%d %% %d =\t%d\n",num1,num2,num1%num2);

break;

default:

printf("Error! Invalid Operator.");

}

return 0;

}

**OUTPUT**

Choose the operator(+,-,,/,%): /

Enter two numbers: 5

0

denominator cannot be 0

**QUESTION 4**

#include<stdio.h>

int main()

{

int rank;

printf("Enter your rank:\n");

scanf("%d",&rank);

if(rank<=3250)

printf("You are eligible for all branches");

else if(rank>3250 && rank<=6505)

printf("You are eligible for ISE,EandC and MEC");

else if(rank>6505 && rank<=12012)

printf("You are eligible for EandC and MEC");

else if(rank>12012 && rank<=22340)

printf("You are eligible for MEC");

else if(rank>22340)

printf("You are Not eligible for any branch");

return 0;

}

**OUTPUT 1**

Enter your rank:

7205

You are eligible for EandC and MEC

**OUTPUT 2**

Enter your rank:

1265

You are eligible for all branches

**OUTPUT 3**

Enter your rank:

25000

You are Not eligible for any branch

**QUESTION 5**

#include<stdio.h>

int main()

{

int book,cost,r,m;

printf("Enter the number of books:\n");

scanf("%d", &book);

if(book<=10000)

{

printf("No discount!");

printf("The total cost=%d", book10);

}

if(book>10000&&book<=15000)

{

printf("Hey you got 10 percent discount!\n");

cost=book10;

r=cost/10;

m=cost-r;

printf("The total cost=%d", m);

}

if(book>15000&&book<=20000)

{

printf("Hey you get 20 percent discount!\n");

cost=book\*10;

r=cost/5;

m=cost-r;

printf("The total cost=%d", m);

}

return 0;

}

**TEST CASE 1 OUTPUT**

Enter the number of books:

8245

No discount! The total cost=82450

**TEST CASE 2 OUTPUT**

Enter the number of books:

12450

Hey you got 10 percent discount!

The total cost=112050