1.

#include<stdio.h>

int main()

{

    int a;

    printf("Enter a no that you want to  check: ");

    scanf("%d",&a);

    if(a>0)

        printf("It is a Positive no.");

    else

        printf("It is a non-positive no.");

    return 0;

}

2.

#include<stdio.h>

int main()

{

    int a;

    printf("Enter a no that you want to check: ");

    scanf("%d", &a);

    if(a % 5 == 0)

        printf("It is divisible by 5.");

    else

        printf("It is not divisible by 5");

    return 0;

}

3.

#include<stdio.h>

int main()

{

    int no;

    printf("Enter a no: ");

    scanf("%d",&no);

    if (no % 2 == 0)

        printf("The entered no is even no.");

    else

        printf("The entered no is odd no.");

    return 0;

}

4.

#include<stdio.h>

// int main()

// {

//     int no, temp;

//     printf("Enter a no: ");

//     scanf("%d",&no);

//     temp = no / 2;

//     if(temp\*2 == no)

//         printf("No is even.");

//     else

//         printf("No  is odd.");

    // return 0;

// }

// OR

int main()

{

    int no;

    printf("Enter a no: ");

    scanf("%d",&no);

    int result = no & 1;

    if(result == 1)

        printf("It's a odd no.");

    else

        printf("It's a even no.");

    return 0;

}

5.

#include<stdio.h>

// int main()

// {

//     int a;

//     printf("Enter a no: ");

//     scanf("%d",&a);

//     if(a>=100)

//     {

//         if(a<1000)

//             printf("It's a three digit no.");

//         printf("It's not a three digit no.");

//     }

//     else

//         printf("It's not a three digit no.");

// }

int main()

{

    int no,count,temp;

    printf("Enter a no: ");

    scanf("%d",&no);

    temp = no;

    for(int i=1; i<=3;i++)

    {

        temp=temp/10;

        count++;

    }

    if(count == 3)

        printf("%d is a three digit no.",no);

    else

        printf("%d is not a three digit no.",no);

}

6.

#include<stdio.h>

int main()

{

    int a, b;

    printf("Enter two no: ");

    scanf("%d%d",&a,&b);

    if(a>b)

        printf("%d is greater",a);

    if(b>a)

        printf("%d is greater",b);

    else

        printf("Both the no are same and the no is = %d",a);

    return 0;

}

7.

#include <math.h>

#include <stdio.h>

int main() {

    double a, b, c, discriminant, root1, root2, realPart, imagPart;

    printf("Enter coefficients a, b and c: ");

    scanf("%lf %lf %lf", &a, &b, &c);

    discriminant = b \* b - 4 \* a \* c;

    if (discriminant > 0) {

        root1 = (-b + sqrt(discriminant)) / (2 \* a);

        root2 = (-b - sqrt(discriminant)) / (2 \* a);

        printf("Its an real and different root\nroot1 = %.2lf and root2 = %.2lf", root1, root2);

    }

    else if (discriminant == 0) {

        root1 = root2 = -b / (2 \* a);

        printf("This is  real and equal roots\nroot1 = root2 = %.2lf;", root1);

    }

    else {

        realPart = -b / (2 \* a);

        imagPart = sqrt(-discriminant) / (2 \* a);

        printf("This root are not real\nroot1 = %.2lf+%.2lfi and root2 = %.2f-%.2fi", realPart, imagPart, realPart, imagPart);

    }

    return 0;

}

8.

#include <math.h>

#include <stdio.h>

int main() {

    double a, b, c, discriminant, root1, root2, realPart, imagPart;

    printf("Enter coefficients a, b and c: ");

    scanf("%lf %lf %lf", &a, &b, &c);

    discriminant = b \* b - 4 \* a \* c;

    if (discriminant > 0) {

        root1 = (-b + sqrt(discriminant)) / (2 \* a);

        root2 = (-b - sqrt(discriminant)) / (2 \* a);

        printf("Its an real and different root\nroot1 = %.2lf and root2 = %.2lf", root1, root2);

    }

    else if (discriminant == 0) {

        root1 = root2 = -b / (2 \* a);

        printf("This is  real and equal roots\nroot1 = root2 = %.2lf;", root1);

    }

    else {

        realPart = -b / (2 \* a);

        imagPart = sqrt(-discriminant) / (2 \* a);

        printf("This root are not real\nroot1 = %.2lf+%.2lfi and root2 = %.2f-%.2fi", realPart, imagPart, realPart, imagPart);

    }

    return 0;

}

9.

#include<stdio.h>

int main()

{

    int a, b, c,result;

    printf("Enter three values: ");

    scanf("%d%d%d",&a,&b,&c);

    result = a>b?a>c?a:c:b>c?b:c;

    printf("%d is greater.",result);

}

10.

#include<stdio.h>

int main()

{

    int cost\_price, sell\_price, profit, loss;

    printf("Enter the buying price : ");

    scanf("%d",&cost\_price);

    printf("Enter selling price : ");

    scanf("%d",&sell\_price);

    if(sell\_price > cost\_price)

    {

        profit = sell\_price - cost\_price;

        printf("You have make %d percent profit.",profit\*100/cost\_price);

    }

    else

    {

        loss = cost\_price - sell\_price;

        printf("You have make %d percent loss.",loss\*100/cost\_price);

    }

}

11.

#include<stdio.h>

int main()

{

    int first\_sub, second\_sub, third\_sub, fourth\_sub, fifth\_sub,total;

    printf("enter five subject mark");

    scanf("%d%d%d%d%d",&first\_sub, &second\_sub, &third\_sub, &fourth\_sub, &fifth\_sub);

    if(first\_sub>33)

        printf("In first subject you are pass.\n");

    else

        printf("In first subject you are fail.\n");

    if(second\_sub>33)

        printf("In second subject you are pass.\n");

    else

        printf("In second subject you are fail.\n");

    if(third\_sub>33)

        printf("In third subject you are pass.\n");

    else

        printf("In third subject you are fail.\n");

    if(fourth\_sub>33)

        printf("In fourth subject you are pass.\n");

    else

        printf("In fourth subject you are fail.\n");

    if(fifth\_sub>33)

        printf("In fifth subject you are pass.\n");

    else

        printf("In fifth subject you are fail.\n");

}

12.

#include<stdio.h>

int main()

{

    char ch;

    printf("Enter a character: ");

    scanf("%c",&ch);

    ch>= 'a' && ch<= 'z'?printf("It's a lower case character."):printf("It's a upper case character.");

}

13.

#include<stdio.h>

int main()

{

    int no;

    printf("Enter a no: ");

    scanf("%d",&no);

    if(no % 3 == 0)

    {

        if(no % 2 == 0)

            printf("No is divisible  by both 2 and 3.");

        else

            printf("No is not divisible by 2 but not 3");

    }

    else

        printf("No is not divisible by both 2 and 3");

}

14.

#include<stdio.h>

int main()

{

    int no=28;

    if(no % 7 == 0)

        printf("%d is divisible by 7.\n",no);

    if(no % 3 == 0)

        printf("%d is divisible by 3.",no);

    return 0;

}

15.

#include<stdio.h>

int main()

{

    int no = 0;

    no>0?printf("%d is a positive no.",no):no<0?printf("%d is a negetive no.",no):printf("%d is zero.",no);

    return 0;

}

16.

#include<stdio.h>

int main()

{

    char ch;

    printf("Enter a character: ");

    scanf("%c",&ch);

    ch >= 'a' && ch <='z'?printf("%c is a lower case",ch):ch >= 'A' && ch <= 'Z'?:printf("%c is a upper case charcter.",ch):ch >= '0' && ch <= '9'?printf("%c is a number.",ch):printf("%c is a special character.");

}

17.

#include<stdio.h>

int main()

{

    int a, b, c;

    printf("Enter three sides: ");

    scanf("%d%d%d",&a,&b,&c);

    if(a+b>c)

        printf("Its a traingle.");

    if(b+c>a)

        printf("Its a traingle.");

    if(c+a>b)

        printf("Its a traingle.");

    return 0;

}

18.

#include<stdio.h>

int main()

{

    int a;

    printf("Enter the month no: ");

    scanf("%d",&a);

    switch (a)

    {

        case 1:

            printf("31");

            break;

        case 2:

            printf("28");

            break;

        case 3:

            printf("31");

            break;

        case 4:

            printf("30");

            break;

        case 5:

            printf("31");

            break;

        case 6:

            printf("30");

            break;

        case 7:

            printf("31");

            break;

        case 8:

            printf("31");

            break;

        case 9:

            printf("30");

            break;

        case 10:

            printf("31");

            break;

        case 11:

            printf("30");

            break;

        case 12:

            printf("31");

            break;

        default:

            printf("You entered a invalid month no.");

            break;

    }

}