ASSIGNMENT 3

1. #include<stdio.h>

int main()

{

    int i;

    printf("Enter a number: \n");

    scanf("%d",&i);

    if(i>0)

    printf("positive no.");

    else

    printf("negative no.");

 return 0;

}

2. #include<stdio.h>

int main()

{

    int n;

    printf("enter a number: \n");

    scanf("%d",&n);

    if(n%5==0)

    printf("divisible by 5");

    else

    printf("not divisible by 5");

    return 0;

}

3. #include<stdio.h>

int main()

{

    int n;

    printf("enter a number \n");

    scanf("%d",&n);

    if(n%2==0)

    printf("even no.");

    else

    printf("odd no.");

    return 0;

}

4. #include<stdio.h>

int main()

{

    int n;

    printf("enter a no. \n");

    scanf("%d",&n);

    if(n&1==0)

    printf("even no.");

    else

    printf("odd no.");

    return 0;

}

5. #include<stdio.h>

int main()

{

   int n, temp, c;

   printf("enter a no.\n");

   scanf("%d",&n);

   if(n>=100 && n<1000)

   printf("3 digit no.");

   else

   printf("not a 3 digit no.");

   return 0;

}

6. #include<stdio.h>

int main()

{

    int a,b;

    printf("enter two numbers\n");

    scanf("%d %d", &a,&b);

    if(a==b)

    printf("%d",a);

    else if(a>b)

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

    else if(b>a)

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

    return 0;

}

7. #include<stdio.h>

int main()

{

    float a,b,c,d;

    printf("enter values of a, b and c\n");

    scanf("%f %f %f", &a,&b,&c);

    printf("Quadratic equation is: %fx2 + %fx + %f", a,b,c);

    d=(b\*b)-(4\*a\*c);

    printf("\ndiscriminant is %f",d);

    if(d==0)

    printf("\nreal and equal roots");

    else if(d>0)

    printf("\nreal and distinct roots");

    else if(d<0)

    printf("\nimaginary roots");

    return 0;

}

8. #include<stdio.h>

int main()

{

    int yr;

    printf("enter a year\n");

    scanf("%d",&yr);

    if(yr%4==0 && yr%400==0)

    printf("leap year");

    else if(yr%100==0)

    printf("not a leap year");

    else

    printf("not a leap year");

    return 0;

}

9. #include<stdio.h>

int main()

{

    int a,b,c,d;

    printf("enter three no.s\n");

    scanf("%d %d %d", &a, &b, &c);

    d=(a>=b && a>=c)?printf("%d is greatest",a) :

           ((b>=a && b>=c)?printf("%d is greatest",b) :

               printf("%d is greatest",c));

  return 0;

}

10. #include<stdio.h>

int main()

{

    float cp,sp,p,l,pp,lp;

    printf("Enter the cost price of the product:\n");

    scanf("%f",&cp);

    printf("Enter the selling price of the product:\n");

    scanf("%f",&sp);

    if(cp<sp)

    {

        p=sp-cp;

        pp=(p/cp)\*100;

        printf("Profit is %f %%",pp);

    }

    else if(cp>sp)

    {

        l=cp-sp;

        lp=(l/cp)\*100;

        printf("Loss is %f %%",lp);

    }

    else if(cp==sp)

    {

        printf("There is no profit as well as no loss");

    }

 return 0;

}

11. #include<stdio.h>

int main()

{

    int marks[5];

    printf("Enter marks of 5 subjects:\n");

    for(int i=0;i<5;i++)

    scanf("%d", &marks[i]);

    for(int i=0;i<5;i++)

    {

        if(marks[i]>=33)

        printf("PASS\n");

        else

        printf("FAIL\n");

    }

    return 0;

}

12. #include<stdio.h>

int main()

{

    char a;

    printf("Enter an alphabet:\n");

    scanf("%c",&a);

    if(a>=65 && a<=90)

    printf("Uppercase alphabhet");

    else if(a>=97 && a<=122)

    printf("Lowercase alphabet");

    else

    printf("Not an alphabet");

return 0;

}

13. #include<stdio.h>

int main()

{

    int n;

    printf("Enter a no.\n");

    scanf("%d",&n);

    if(n%3==0 && n%2==0)

    printf("The number is divisible by 3 and 2");

    else

    printf("The number is not divisible by 3 and 2");

    return 0;

}

14. #include<stdio.h>

int main()

{

    int n;

    printf("Enter a no.\n");

    scanf("%d",&n);

    if(n%7==0 || n%3==0)

    printf("The number is divisible by 7 or 3");

    else

    printf("The number is not divisible by 7 or 3");

    return 0;

}

15. #include<stdio.h>

int main()

{

    int n;

    printf("Enter a no.:\n");

    scanf("%d",&n);

    if(n>0)

    printf("Positive");

    else if(n<0)

    printf("Negative");

    else if(n==0)

    printf("Zero");

    return 0;

}

16. #include<stdio.h>

int main()

{

    char a;

    printf("Enter something:\n");

    scanf("%c",&a);

    if(a>=65 && a<=90)

    printf("Uppercase alphabhet");

    else if(a>=97 && a<=122)

    printf("Lowercase alphabet");

    else if(a>=48 && a<=57)

    printf("A Digit");

    else

    printf("Special character");

    return 0;

}

17. #include<stdio.h>

int main()

{

    int a,b,c;

    printf("Enter three sides of a triangle:\n");

    scanf("%d %d %d", &a, &b, &c);

    if((a+b>c) || (b+c>a) || (a+c>b))

    printf("Valid triangle");

    else

    printf("Invalid");

    return 0;

}

18. #include<stdio.h>

int main()

{

    int n;

    printf("Enter the month number:\n");

    scanf("%d", &n);

    if(n==2)

    printf("28 - Not a leap year \n29 - Leap year");

    else if(n%2!=0)

    printf("31");

    else

    printf("30");

  return 0;

}