**Practical 5**

1.

#include <stdio.h>

int main()

{

    int x=0;

    while(x<=100)

       {

        printf("%d ",x);

        x++;

       }

}

#include <stdio.h>

int main()

{

    int x=0;

    do

    {

        printf("%d ",x);

        x++;

    }

    while(x<=100);

}

#include <stdio.h>

int main()

{

    int x;

    for(x=0;x<=100;x++)

    printf("%d ",x);

}

2.

#include <stdio.h>

int main()

{

    int marks,counter=1,sum=0;

    float avg;

    while(counter<=10)

    {

        printf("Enter mark of subject %d ",counter);

        scanf("%d",&marks);

        sum=sum+marks;

        counter++;

    }

    avg=(float)sum/10;

    printf("The Average is %.2f\n ",avg);

    if(avg<50){

        printf("Fail!\n ");

    }else {

        printf("Pass!\n "); }

}

10.

#include <stdio.h>

int main()

{

    printf("\*\n");

    printf("\*\*\n");

    printf("\*\*\*\n");

    printf("\*\*\*\*\n");

    printf("\*\*\*\*\*\n");

}

12.

#include <stdio.h>

int main()

{

    int num,sum=0;

    while(1){

        printf("Enter a number ");

        scanf("%d", &num);

        if(num == -1) {

            break;

        }

        sum += num;

    }

    printf("The sum is %d\n", sum);

}

16.

#include <stdio.h>

int main()

{

    int num,positivecount=0,negativecount=0,zerocount=0;

    for(int i=0;i<10;i++) {

        printf("Enter number %d ",i+1);

        scanf("%d", &num);

        if(num>0) {

            positivecount++;

        } else if(num<0) {

            negativecount++;

        } else{

            zerocount++;

        }

    }

    printf("Number of positive numbers %d\n", positivecount);

    printf("Number of negative numbers %d\n", negativecount);

    printf("Number of zeros %d\n", zerocount);

}

17.

#include <stdio.h>

int main()

{

    int marks,max,min,total;

    float avg;

    for(int i=0;i<10;i++) {

        printf("Enter marks for student %d ",i + 1);

        scanf("%d",&marks);

        if(i == 0){

            max=marks;

            min=marks;

        } else {

            if (marks>max) {

                max=marks;

            }

            if (marks<min) {

                min=marks;

            }

        }

        total += marks;

    }

    avg=(float)total/10;

    printf("Maximum marks %d\n", max);

    printf("Minimum marks %d\n", min);

    printf("Average marks %.2f\n", avg);

}

18.

#include <stdio.h>

int main()

{

    float price,total=0,avg;

    int count=0;

    for(int i=0;i<10;i++) {

        printf("Enter price for item %d ",i + 1);

        scanf("%f", &price);

        total += price;

        if (price>200) {

            count++;

        }

    }

    avg=total/10;

    printf("Average value of an item is %.2f\n", avg);

    printf("Number of items with price greater than 200 = %d\n", count);

}

19.

#include <stdio.h>

int main()

{

    int employeeNo,count=0;

    float basicsalary;

    while(1){

        printf("Employee Number = ");

        scanf("%d", &employeeNo);

        if(employeeNo == -999){

            break;

        }

        printf("Basic Salary = ");

        scanf("%f", &basicsalary);

        if(basicsalary>=5000) {

            count++;

        }

    }

    printf("Number of Employees with Basic Salary is greater than or equal 5000 = %d\n", count);

}