**1.**

#include<stdio.h>

void main() {

int arr[10];

for (int i = 0; i < 10; i++) {

scanf\_s("%i", &arr[i]);

}

}

**2.**

#include<stdio.h>

void main() {

int arr[10], bigest = 0;

for (int i = 0; i < 10; i++) {

scanf\_s("%i", &arr[i]);

}

for (int i = 0; i < 10; i++) {

if (arr[i] > bigest) {

bigest = arr[i];

}

}

printf("%i", bigest);

}

**3.**

#include<stdio.h>

void main() {

int arr[10], sum = 0;

for (int i = 0; i < 10; i++) {

scanf\_s("%i", &arr[i]);

}

for (int i = 0; i < 10; i++) {

sum = sum + arr[i];

}

printf("%i", sum);

}

**4.**

#include<stdio.h>

void main() {

int arr[10];

double sum = 0;

for (int i = 0; i < 10; i++) {

scanf\_s("%i", &arr[i]);

}

for (int i = 0; i < 10; i++) {

sum = sum + arr[i];

}

printf("%lf", sum/10);

}

**5.**

#include<stdio.h>

void main() {

int arr[10];

double sum = 0;

for (int i = 0; i < 10; i++) {

scanf\_s("%i", &arr[i]);

}

for (int i = 0; i < 10; i++) {

int a = 1;

for (int x = 1; x <= arr[i]; x++) {

a = a \* x;

}

printf("the assembly is:%i\n", a);

}

}

**.6**

#include<stdio.h>

void main() {

int arr[10], sum;

for (int i = 0; i < 10; i++) {

scanf\_s("%i", &arr[i]);

}

for (int p = 0; p < 10; p++) {

sum = 1;

for (int i = arr[p]; i > 0; i = i / 10) {

sum = sum \*(i % 10);

}

printf("the sum of %i is %i\n", arr[p], sum);

}

}

**7.**

#include<stdio.h>

void main() {

int arr[100], arr2[100], x, q = 0, index = 0;

scanf\_s("%i", &x);

for (int i = 0; i < 100 && x != 0; i++) {

arr[i] = x;

index++;

scanf\_s("%i", &x);

}

for (int p = 0; p < index; p++)

{

int a = 1;

for (int r = p + 1; r < index; r++) {

if (arr[p] == arr[r]) {

a = 0;

}

}

if (a == 1) {

arr2[q] = arr[p];

q++;

}

}

printf("the new vector is:\n");

for (int i = 0; i < q; i++) {

printf("%i ", arr2[i]);

}

printf("\nthe number of elements is:%i", q);

}

**8.**

#include<stdio.h>

void main() {

int arr[10], x, y;

scanf\_s("%i", &x);

arr[0] = x;

scanf\_s("%i", &y);

arr[1] = y;

for (int i = 2; i < 10; i++) {

arr[i] = arr[i - 1] + arr[i - 2];

}

for (int i = 0; i < 10; i++) {

printf("%i ", arr[i]);

}

}

**9.**

#include<stdio.h>

void main() {

int arr[10];

for (int i = 0; i < 10; i++) {

scanf\_s("%i", &arr[i]);

}

for (int i = 0; i < 10; i++) {

int number = 0;

for (int k = 0; k < 10; k++) {

if (arr[i] % arr[k] == 0) {

number++;

}

}

printf("%i:%i\n", arr[i], number);

}

}

**10.**

#include<stdio.h>

void main()

{

int arr[20];

int arr2[20];

int arr3[21];

printf("enter number one:\n");

for(int i = 0; i < 20; i++) {

scanf\_s("%i", &arr[i]);

}

printf("enter number two:\n");

for (int i = 0; i < 20; i++) {

scanf\_s("%i", &arr2[i]);

}

int y = 0;

for (int i = 19; i >= 0; i--) {

int x = arr[i] + arr2[i] + y;

int z = x % 10;

y = x / 10;

arr3[i+1] = z;

}

arr3[0] = y;

for (int i = 0; i <= 20; i++) {

printf("%i", arr3[i]);

}

}