Exersics-:

// question no 1.

#include<stdio.h>

void main()

{

int age[5]={30,25,45,35,60};

double a[5]={3.67,1.21,5.87,7.45,9.12};

printf("%d\n",age[0]);

printf("\t%ld",a[2]);

}

// question 2.

#include<stdio.h>

void main()

{

int a[5]={4,3,6,5,1,2};

printf("%d",a[2]);

}

// question no.3

#include<stdio.h>

void main()

{

int a[]={10};

printf("%d",a[0]);

}

// question no.4

#include<stdio.h>

#define N 10

void main()

{

float arr[N]={2,4,1,5,6,9,8,3,10,7};

int i=1,j=3,k=2;

printf("%.1f\n",arr[0]);

printf("%.1f\n",arr[3]);

printf("%.1f\n",arr[9]);

printf("%.1f\n",arr[i\*j+k]);

printf("%.1f\n",arr[N-5]);

printf("%.1f\n",arr[N-1]);

}

// question no 5.

#include<stdio.h>

void main()

{

int a[3]={5,4,7};

int b[3];

b[3]=a[3];

printf("%d\t%d\t%d\t\n",a[0],a[1],a[2]);

printf("%d%d%d",b[0],b[1],b[2]);

}

Programs-:

// wap to find transpose of a matrix.

#include<stdio.h>

void main()

{

int arr[3][3],i,j;

printf("\nenter element :");

for(i=0;i<=2;i++)

{

for(j=0;j<=2;j++)

{

scanf("%d",&arr[i][j]);

}

}

printf("\nmatrix tranpose--------\n");

for(i=0;i<=2;i++)

{

for(j=0;j<=2;j++)

{

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

}

printf("\n");

}

}

// wap to delet elemet from the array of n element of at the specified postion

#include<stdio.h>

void main()

{

int arr[100],num,i,pos;

printf("enter a number : ");

scanf("%d",&num);

for(i=0;i<=num;i++)

{

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

}

printf(" enter deleting index value :");

scanf("%d",&pos);

// check valid postion

if(pos<0 || pos>num)

{

printf("invalid position : ");

}

else

{

for(i=pos-1;i<=num;i++)

{

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

}

i--;

printf("after deleting an element :\n");

for(i=0;i<=num;i++)

{

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

}

}

}

// 9. wap to find the sum of positive number and negative numbers in the given list of n numbers.

#include<stdio.h>

void main()

{

int arr[100],i,num,sum1=0,sum2=0;

printf("enter a number max 100 ");

scanf("%d",&num);

for(i=0;i<=num;i++)

{

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

if(arr[i]>0)

sum1=sum1+arr[i];

if(arr[i]<0)

sum2=sum2+arr[i];

}

printf("sum of positive : %d\nsum of negative numbrers %d",sum1,sum2);

// sum of even number

}

// 10. WAP to find the sum and count of even and odd number in the given list of n number.

#include<stdio.h>

void main()

{

int arr[100],i,num,sum1=0,count1,sum2=0,count2;

printf("Enter a number max 100 : ");

scanf("%d",&num);

for(i=0;i<=num;i++)

{

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

// even numbers sum and count

if(arr[i]%2==0)

{

sum1=sum1+arr[i];

count1++;

}

// odd numbers sum and count

if(arr[i]%2==1)

{

sum2=sum2+arr[i];

count2++;

}

}

printf("sum of even number %d\ncount of even number %d\n",sum1,count1);

printf("sum of odd numbers %d\ncount of odd numbers%d",sum2,count2);

}

//8. wap to find the count of positive numbers ,negative numbers and zeros in the given list of n numbers.

#include<stdio.h>

void main()

{

int arr[100],i,num,count1=0,count2=0,count3=0;

printf("Enter a number max 100 : ");

scanf("%d",&num);

for(i=0;i<=num-1;i++)

{

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

if(arr[i]>0)

count1++;

if(arr[i]<0)

count2++;

if(arr[i]==0)

count3++;

}

printf("count of positive number %d\n",count1);

printf("count of negative number %d\n",count2);

printf("count of zeros number %d\n",count3);

}

//14. wap to find substratction of two given matrix.

#include<stdio.h>

void main()

{

int arr1[10][10],arr2[10][10],arr3[10][10],num,i,j;

printf("enter a number max 10 : ");

scanf("%d",&num);

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*enter first matrix element\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

for(i=0;i<=num-1;i++)

{

for(j=0;j<=num-1;j++)

{

scanf("%d",&arr1[i][j]);

}

}

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Enter second matrix element\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

for(i=0;i<=num-1;i++)

{

for(j=0;j<=num-1;j++)

{

scanf("%d",&arr2[i][j]);

}

}

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*both matrix operation \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

for(i=0;i<=num-1;i++)

{

for(j=0;j<=num-1;j++)

{

arr3[i][j]=arr1[i][j]-arr2[i][j];

}

}

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*substraction of two matrix\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* : \n");

for(i=0;i<=num-1;i++)

{

for(j=0;j<=num-1;j++)

{

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

}

printf("\n");

}

}

//7. wap to find maximum and minimum in the given list of n numbers.

#include<stdio.h>

void main()

{

int arr[100],i,num,max,min;

printf("Enter a number max 100 : ");

scanf("%d",&num);

for(i=0;i<=num;i++)

{

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

}

max=arr[0];

min=arr[0];

for(i=0;i<=num;i++)

{

if(arr[i]>max)

max=arr[i];

if(arr[i]<min)

min=arr[i];

}

printf("max value is : %d\n min value is : %d",max,min);

}

// 6.wap to find total and average of n given numbers and find the numbers which are greater than the abverage.

#include<stdio.h>

void main()

{

int arr[100],i,num,sum=0,avg,greater;

printf("Enter a number max 100 : ");

scanf("%d",&num);

for(i=0;i<=num-1;i++)

{

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

sum=sum+arr[i];

avg=sum/num;

}

greater=avg;

for(i=0;i<=num;i++)

{

if(avg>greater)

greater=avg;

}

printf("sum of : %d\navg of : %d\ngrter of : %d",sum,avg,greater);

}

// 13.wap to find the sum of square of element in a given matrix.

#include<stdio.h>

void main()

{

int arr[100][100],i,j,num,a,sum=0;

printf("enter a number max 100 : ");

scanf("%d",&num);

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* enter array of element\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

for(i=0;i<=num-1;i++)

{

for(j=0;j<num;j++)

{

scanf("%d",&arr[i][j]);

}

}

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*square of element\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

for(i=0;i<=num-1;i++)

{

for(j=0;j<num;j++)

{

a=arr[i][j]\*arr[i][j];

printf("%d ",a);

}

printf("\n");

}

printf("=============================sum of square====================================================")

for(i=0;i<=num-1;i++)

{

for(j=0;j<num;j++)

{

sum=sum+arr[i][j]\*arr[i][j];

printf("%d\n",sum);

}

}

}