1. Write a C program which can input last seven days temperature into an array and display the average temperature.

Sample Input

36 35 39 37 38 39 38

Sample Output

37.428571

#include<stdio.h>

#include<math.h>

int main(){

int x[10000],i,n,a;

float b;

printf("Enter the total number of day:\n");

scanf("%d",&n);

printf("Enter the temperature one by one:\n");

a=0;

for(i=0;i<n;i++){

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

}

for(i=0;i<n;i++){

a=a+x[i];

}

b=(float)a/n;

printf("The average temperature: %.2f",b);

return 0;

}

2. Write a C program which can some 2D points into an array (The x values in one array and y values in

another array). Display how many points are in each quadrant

Sample Input.

4

5 5

8 8

4 9

3 1

Sample Output

4 0 0 0

#include<stdio.h>

#include<math.h>

int main(){

int x[100000],y[100000],i,n,a,b,c,d;

printf("Enter the total number of the points:\n");

scanf("%d",&n);

printf("Enter the points (x,y) one by one:\n");

a=0;

b=0;

c=0;

d=0;

for(i=0;i<n;i++){

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

}

for(i=0;i<n;i++){

if(x[i]>0 && y[i]>0){

a=a+1;

}

if(x[i]<0 && y[i]>0){

b=b+1;

}

if(x[i]<0 && y[i]<0){

c=c+1;

}

if(x[i]>0 && y[i]<0){

d=d+1;

}

}

printf("Points are in each quadrant:\n\t%d %d %d %d ",a,b,c,d);

return 0;

}

3. Write a C program which can input last seven days temperature into an array and display the highest

temperature. How many days that highest is found

Sample Input

36 35 39 37 38 39 38

Sample Output

39

2

#include<stdio.h>

#include<math.h>

int main(){

int x[100000],y,i,n,a;

printf("Enter the total number of days:\n");

scanf("%d",&n);

printf("Enter the temperature one by one:\n");

y=0;

a=0;

for(i=0;i<n;i++){

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

if(x[i]>y){

y=x[i];

a=a+1;

}

}

printf("The highest temperature is: %d\nand the temperature total found %d days.",y,a);

return 0;

}

4. Write a C program which can input some persons’ age into an array and display how many of them

are older than average age of those persons’

Sample Input

6

40 30 10 10 15 15

Sample Output

2

#include<stdio.h>

#include<math.h>

int main(){

int x[100000],i,n,a,m;

float b;

printf("Enter the total number of ages:\n");

scanf("%d",&n);

printf("Enter the ages one by one:\n");

a=0;

m=0;

for(i=0;i<n;i++){

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

a=a+x[i];

}

b=(float)a/n;

for(i=0;i<n;i++){

if(x[i]>b);

m++;

}

printf("The number of the persons who are older than average ages: %d",m);

return 0;

}

5. Write a C program which can input some students’ age of a particular class into an array and check whether there is any teenager in that class.

Sample Input

6

40 30 10 10 15 15

Sample Output

Yes

#include<stdio.h>

#include<math.h>

int main(){

int x[100000],i,n,a;

printf("Enter the total number of ages:\n");

scanf("%d",&n);

printf("Enter the ages one by one:\n");

a=0;

for(i=0;i<n;i++){

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

}

for(i=0;i<n;i++){

if(x[i]>12 && x[i]<20){

a=a+1;

}

}

if(a>0){

printf("Yes");

}

else{

printf("No");

}

return 0;

}

6. Write a C program which can input some students’; marks and check whether any student got full marks. You may assume that exam’s total mark is 30.

Sample Input

6

22 29 10 10 15 15

Sample Output

No

#include<stdio.h>

#include<math.h>

int main(){

int x[100000],i,n,a;

printf("Enter the total number of students:\n");

scanf("%d",&n);

printf("Enter the numbers one by one:\n");

a=0;

for(i=0;i<n;i++){

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

}

for(i=0;i<n;i++){

if(x[i]==30){

a=a+1;

}

}

if(a>0){

printf("Yes");

}

else{

printf("No");

}

return 0;

}

7. Write a C program which can input some students’ marks and display which grades are achieved by most of the students (Grades are A, B, C, and D)

Sample Input

8

77 65 74 97 87 85 99 80

Sample Output

B

#include<stdio.h>

#include<math.h>

int main(){

int x[100000],i,n,a,b,c,d;

printf("Enter the total number of students:\n");

scanf("%d",&n);

printf("Enter the marks one by one:\n");

a=0;

b=0;

c=0;

d=0;

for(i=0;i<n;i++){

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

}

for(i=0;i<n;i++){

if(x[i]>=90){

a=a+1;}

if(x[i]>=80 && x[i]<90){

b=b+1;}

if(x[i]>=70 && x[i]<80){

c=c+1;}

if(x[i]>=60 && x[i]<70){

d=d+1;

}

}

if(a>=b && a>=c && a>=d ){

printf("The grades are achieved by most of the students: A");

}

else if(b>=a && b>=c && b>=d ){

printf("The grades are achieved by most of the students: B");

}

else if(c>=b && c>=a && c>=d ){

printf("The grades are achieved by most of the students: C");

}

else if(d>=a && d>=c && d>=a ){

printf("The grades are achieved by most of the students: D");

}

return 0;

}

8. Write a C program which can input last seven days temperature and display in how many days the temperature is increased than that of immediate previous day

Sample Input

36 35 39 37 38 39 38

Sample Output

3

#include<stdio.h>

#include<math.h>

int main(){

int x[100000],i,n,a;

printf("Enter the total number of days:\n");

scanf("%d",&n);

printf("Enter the temperature one by one:\n");

a=0;

for(i=0;i<n;i++){

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

}

for(i=0;i<n;i++){

if(x[i]<x[i+1]){

a=a+1;

}

}

printf("Total days when the temperature is increased than that of immediate previous day: %d",a);

return 0;

}