//assignment 2

Code:

Input:

#include <stdio.h>

int main() {

int arr[5];

for(int i=0;i<=4;i++){

printf("marks of %d student is :\n",i+1);

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

}

for(int i=0;i<=4;i++){

printf("marks of %d student is %d\n",i+1,arr[i]+5);

}

return 0;

}

Output: marks of 1 student is :

96

marks of 2 student is :

95

marks of 3 student is :

92

marks of 4 student is :

91

marks of 5 student is :

85

marks of 1 student is 101

marks of 2 student is 100

marks of 3 student is 97

marks of 4 student is 96

marks of 5 student is 90

=== Code Execution Successful ===

//print the grade of the student

//code:

Input:

#include <stdio.h>

int main() {

int marks[5];

for(int i=0;i<=4;i++){

printf("marks of %d student is :\n",i+1);

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

}

for(int i=0;i<=4;i++){

if(marks[i]>=75){

printf("A\n");

}

else if(marks[i]>=60&&marks[i]<=74){

printf("B\n");

}

else if(marks[i]<=59&&marks[i]>=40){

printf("C\n");

}

else if(marks[i]<40){

printf("D\n");

}

else{

printf("negative number");

}

}

return 0;

}

Output: marks of 1 student is :

96

marks of 2 student is :

95

marks of 3 student is :

85

marks of 4 student is :

96

marks of 5 student is :

52

A

A

A

A

C

=== Code Execution Successful ===

//to found who has scored first 99marks

Code:

Input:

#include <stdio.h>

int main() {

int marks[5];

for(int i=0;i<=4;i++){

printf("marks of %d student is :\n",i+1);

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

}

int found99=0;

for(int i=0;i<=4;i++){

if(marks[i]==99){

printf("marks of %d student is 99",i+1);

found99=1;

}

}

if(!found99){

printf("no one has scored");

}

return 0;

}

Output: marks of 1 student is :

56

marks of 2 student is :

96

marks of 3 student is :

52

marks of 4 student is :

99

marks of 5 student is :

95

marks of 4 student is 99

=== Code Execution Successful ===

//how many student has scored 99 marks

Code:

Input:

#include <stdio.h>

int main() {

int marks[5];

for(int i=0;i<=4;i++){

printf("marks of %d student is :\n",i+1);

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

}

int count=0;

for(int i=0;i<=4;i++){

if(marks[i]==99){

count++;

}

}

printf("%d student has scored 99 marks",count);

return 0;

}

Output: marks of 1 student is :

99

marks of 2 student is :

96

marks of 3 student is :

95

marks of 4 student is :

92

marks of 5 student is :

93

1 student has scored 99 marks

=== Code Execution Successful ===

//sum of marks of student

Code:

Input:

int main() {

int marks[5];

for(int i=0;i<=4;i++){

printf("marks of %d student is :\n",i+1);

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

}

int sum=0;

for(int i=0;i<=4;i++){

sum+=marks[i];

}

printf("sum of marks of student is %d",sum);

return 0;

}

Output: marks of 1 student is :

96

marks of 2 student is :

95

marks of 3 student is :

92

marks of 4 student is :

91

marks of 5 student is :

93

sum of marks of student is 467

=== Code Execution Successful ===

//average scores of the marks array

Code:

Input: #include <stdio.h>

int main() {

float marks[5];

for(int i=0;i<=4;i++){

printf("marks of %d student is :\n",i+1);

scanf("%f",&marks[i]);

}

float sum=0;

float average;

for(int i=0;i<=4;i++){

sum+=marks[i];

}

average=sum/5;

printf("average of marks of student is %f",average);

return 0;

}

Output: marks of 1 student is :

96

marks of 2 student is :

95

marks of 3 student is :

92

marks of 4 student is :

93

marks of 5 student is :

91

average of marks of student is 93.400002

=== Code Execution Successful ===

//to check whether score is even or odd

Code:

Input: #include <stdio.h>

int main() {

int marks[5];

for(int i=0;i<=4;i++){

printf("marks of %d student is :\n",i+1);

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

}

for(int i=0;i<=4;i++){

if(marks[i]%2==0){

printf("EVEN\n");

}

else{

printf("ODD\n");

}

}

return 0;

}

Output: marks of 1 student is :

96

marks of 2 student is :

95

marks of 3 student is :

92

marks of 4 student is :

91

marks of 5 student is :

79

EVEN

ODD

EVEN

ODD

ODD

=== Code Execution Successful ===

//maximum marks in an array

Code:

Input: #include <stdio.h>

int main() {

int marks[5];

for(int i=0;i<=4;i++){

printf("marks of %d student is :\n",i+1);

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

}

int max=marks[0];

for(int i=1;i<=4;i++){

if(marks[i]>max){

max=marks[i];

}

}

printf("maximum marks is %d",max);

return 0;

}

Output: marks of 1 student is :

99

marks of 2 student is :

98

marks of 3 student is :

25

marks of 4 student is :

85

marks of 5 student is :

95

maximum marks is 99

=== Code Execution Successful ===

//minimum marks in an array

Code:

Input:

#include <stdio.h>

int main() {

int marks[5];

for(int i=0;i<=4;i++){

printf("marks of %d student is :\n",i+1);

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

}

int min=marks[0];

for(int i=1;i<=4;i++){

if(marks[i]<min){

min=marks[i];

}

}

printf("minimum marks is %d",min);

return 0;

}

Output: #include <stdio.h>

int main() {

int marks[5];

for(int i=0;i<=4;i++){

printf("marks of %d student is :\n",i+1);

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

}

int min=marks[0];

for(int i=1;i<=4;i++){

if(marks[i]<min){

min=marks[i];

}

}

printf("minimum marks is %d",min);

return 0;

}

//Peak element in an array

Code:

Input:

#include<stdio.h>

int main(){

int arr[5];

for(int i=0;i<=4;i++){

printf("enter the %d element",i+1);

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

}

for(int i=0;i<=4;i++){

if(arr[i]>=arr[i-1]&&arr[i]>=arr[i+1]){

printf("Peak element is %d at index %d\n", arr[i], i);

}

}

return 0;

}

Output: enter the 1 element5

enter the 2 element6

enter the 3 element2

enter the 4 element4

enter the 5 element5

Peak element is 6 at index 1

=== Code Execution Successful ===

//count prime numbers in an array

Code:

Input: #include<stdio.h>

int main(){

int n;

printf("Enter the number of elements: ");

scanf("%d", &n);

int arr[n];

printf("Enter the elements of the array:\n");

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

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

}

int primeCount = 0;

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

int num = arr[i];

int isPrime = 1;

if (num <= 1) {

isPrime = 0;

} else {

for (int j = 2; j \* j <= num; j++) {

if (num % j == 0) {

isPrime = 0;

break;

}

}

}

if (isPrime) {

primeCount++;

}

}

printf("The number of prime numbers in the array is: %d\n", primeCount);

return 0;

}

Output: Enter the number of elements: 5

Enter the elements of the array:

6

9

5

3

5

The number of prime numbers in the array is: 3

=== Code Execution Successful ===