

- 1- Write a to test if an array contains a specific value if it is in the array print Yes if its not print no.

Ex :

Enter a size of array :

5

Enter numbers :

1 2 3 4 5

Enter a specific value :

5

Output : **yes**

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- 2- Write a program to calculate the average value of array elements.

Ex :

Enter a size of array :

5

Enter numbers :

1 2 3 4 5

Output : average = 3

3- Write a program to find the second smallest element in an array.

Ex :

Enter a size of array :

5

Enter numbers :

5 4 2 3 1

Output : second smallest = 2

4-Write a program that reads student scores, gets the best score,

and then assigns grades based on the following scheme:

Grade is A if score is \geq best - 10

Grade is B if score is \geq best - 20;

Grade is C if score is \geq best - 30;

Grade is D if score is \geq best - 40;

Grade is F otherwise.

The program prompts the user to enter the total number of students, then prompts

the user to enter all of the scores, and concludes by displaying the grades. Here is a sample run:

Enter the number of students: 4

Enter 4 scores:

40

55

70

58

Student 1 score is 40 and grade is C

Student 2 score is 55 and grade is B

Student 3 score is 70 and grade is A

Student 4 score is 58 and grade is B

5)Write a program that reads the integers between 1 and 100 and counts the occurrences of each. Assume the input ends with 0. Here

is a sample run of the program:

Enter the integers between 1 and 100: 2 5 6 5 4 3 23 43 2 0

2 occurs 2 times

3 occurs 1 time

4 occurs 1 time

5 occurs 2 times

6 occurs 1 time

23 occurs 1 time

43 occurs 1 time

6) Write a **function** that takes a string sentence from the user and remove a specific letter that the user will enter, then print it .

Example:

Type a sentence:

This is a test

Choose the letter: s

Output: thi i a tet (Letter 's' is removed)

7) Write a **function** that takes an integer list from the user by entering each element one by one ,then prints the average of these numbers.

Example:

Enter the numbers: 1 2 3

The average: 2

8) Write a **function** that takes a sentence from the user and returns the longest word in the sentence.

Example:

Type a sentence:

My name is mohamed

The longest word : mohamed