

findAr1D

Write a function **findAr1D()** that returns the subscript of the **first appearance** of a target number in an array. For example, if ar = { 3,6,9,4,7,8 }, then **findAr1D(6,ar,3)** will return 0 where 6 is the size of the array and 3 is the number to be found, and **findAr1D(6,ar,9)** will return 2. If the required number is not in the array, the function will return -1. The function prototype is given as follows:

```
int findAr1D(int size, int ar[ ], int target);
```

A sample program template is given below to test the function:

```
#include <stdio.h>
#define INIT_VALUE -1000
int findAr1D(int size, int ar[], int target);
int main()
{
    int ar[20];
    int size, i, target, result = INIT_VALUE;

    printf("Enter array size: \n");
    scanf("%d", &size);
    printf("Enter %d data: \n", size);
    for (i=0; i<=size-1; i++)
        scanf("%d", &ar[i]);
    printf("Enter the target number: \n");
    scanf("%d", &target);
    result = findAr1D(size, ar, target);
    if (result == -1)
        printf("findAr1D(): Not found\n");
    else
        printf("findAr1D(): %d", result);
    return 0;
}
int findAr1D(int size, int ar[], int target)
{
    /* Write your code here */
}
```

Some sample input and output sessions are given below:

(1) Test Case 1:
Enter array size:
5
Enter 5 data:
1 2 3 4 5
Enter the target number:
3
findAr1D(): 2

(2) Test Case 2:

Enter array size:

1

Enter 1 data:

5

Enter the target number:

5

findAr1D(): 0

(3) Test Case 3:

Enter array size:

7

Enter 7 data:

1 3 5 7 9 11 15

Enter the target number:

15

findAr1D(): 6

(4) Test Case 4:

Enter array size:

7

Enter 7 data:

1 3 5 7 9 11 15

Enter the target number:

2

findAr1D(): Not found