findMinMax1D

Write a C function that takes in an one-dimensional array of integers ar and size as parameters. The function finds the minimum and maximum numbers of the array. The function returns the minimum and maximum numbers through the pointer parameters min and max via call by reference. The function prototype is given as follows:

```
void findMinMax1D(int ar[], int size, int *min, int *max);
```

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

```
#include <stdio.h>
void findMinMax1D(int ar[], int size, int *min, int *max);
int main()
{
  int ar[40];
  int i, size;
  int min, max;

  printf("Enter array size: \n");
  scanf("%d", &size);
  printf("Enter %d data: \n", size);
  for (i=0; i<size; i++)
    scanf("%d", &ar[i]);
  findMinMax1D(ar, size, &min, &max);
  printf("min = %d; max = %d\n", min, max);
  return 0;
}
void findMinMax1D(int ar[], int size, int *min, int *max)
{
    /* 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 5 6
min = 1; max = 6

(2) Test Case 2:
Enter array size:
6
Enter 6 data:
-4 0 -7 3 2 1
min = -7; max = 3

(3) Test Case 3:
Enter array size:

```
void findMinMax1D(int ar[], int size, int
*min, int *max)
{
   int i;

   *max = ar[0];
   for(i=1;i<size;i++)
   {
      if(ar[i]>*max)
      {
         *max = ar[i];
      }
   }
   *min=ar[0];
   for(i=1;i<size;i++)
   {
      if(ar[i]<*min)
      {
         *min = ar[i];
      }
   }
}
```

```
1
Enter 1 data:
1
min = 1; max = 1
```