

longestStrInAr

Write a C function `longestStrInAr()` that takes in an array of strings `str` and `size` (>0) as parameters, and returns the longest string and also the length of the longest string via the pointer parameter `length`. If two or more strings have the same longest string length, then the first appeared string will be returned to the calling function. For example, if `size` is 5 and the array of strings is {"peter", "john", "mary", "jane", "kenny"}, then the longest string is "peter" and the string length is 5 will be returned to the calling function. The function prototype is:

```
char *longestStrInAr(char str[N][40], int size, int *length);
```

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

```
#include <stdio.h>
#include <string.h>
#define N 20
char *longestStrInAr(char str[N][40], int size, int *length);
int main()
{
    int i, size, length;
    char str[N][40], first[40], last[40], *p, *result;
    char dummychar;

    printf("Enter array size: \n");
    scanf("%d", &size);
    scanf("%c", &dummychar);
    for (i=0; i<size; i++) {
        printf("Enter string %d: \n", i+1);
        fgets(str[i], 40, stdin);
        if (p=strchr(str[i], '\n')) *p = '\0';
    }
    result = longestStrInAr(str, size, &length);
    printf("longest: %s \nlength: %d\n", result, length);
    return 0;
}

char *longestStrInAr(char str[N][40], int size, int *length)
{
    /* Write your code here */
}
```

Some sample input and output sessions are given below:

(1) Test Case 1:
Enter array size:
4
Enter string 1:
Kenny
Enter string 2:
Mary
Enter string 3:
Peter
Enter string 4:
Sun
longest: Kenny
length: 5

(2) Test Case 2:
Enter array size:
2
Enter string 1:

```
Sun
Enter string 2:
Mary
longest: Mary
length: 4
```