

Lab 6.6.11.2 Function parameters: part 2

Objectives

Familiarize the student with:

- Functions
- Function calls with parameters
- Calling functions with parameters
- Function return values
- Printing on screen

Scenario

Write a function that checks whether or not a given string is a valid IP address (in human-readable form, of course). This function should return 1 if the address is valid, and 0 if not. Your function should check if:

- there are 4 parts in the string, separated by dots;
- each part contains only digits,
- each number is in the range of 0 to 255, inclusive.

For converting string fragments to integer values you can use the *strtol*, *atoi* or *sscanf* functions. Separate the declaration of the function from its full definition. Write a second function that calls the first one and then prints an appropriate message: "127.0.0.1 is a valid IP address" or "a.b.c.d is not a valid IP address". Write a code to test it with some values - call a second function. Do not limit yourself only to those values we have given you.

```
#include <stdio.h>

/* your code */

int main()
{
    /* your code */
    return 0;
}

/* your code */
```

Example output

```
127.0.0.1 is a valid IP address
127.0.01 is not a valid IP address
127.0..1 is not a valid IP address
127.zero.0.1 is not a valid IP address
127.297.0.1 is not a valid IP address
127.2555.0.1 is not a valid IP address
```