

```
/* Return length of number */
long long numLen(long long num)
{
    if (num >= 0 && num < 10) return 1;
    if (num >= 10 && num < 100) return 2;
    if (num >= 100 && num < 1000) return 3;
    if (num >= 1000 && num < 10000) return 4;
    if (num >= 10000 && num < 100000) return 5;
    if (num >= 100000 && num < 1000000) return 6;
    if (num >= 1000000 && num < 10000000) return 7;
    if (num >= 10000000 && num < 100000000) return 8;
    if (num >= 100000000 && num < 1000000000) return 9;
    if (num >= 1000000000 && num < 10000000000) return 10;
    if (num >= 10000000000 && num < 100000000000) return 11;
    if (num >= 100000000000 && num < 1000000000000) return 12;
    if (num >= 1000000000000 && num < 10000000000000) return 13;
    if (num >= 10000000000000 && num < 100000000000000) return 14;
    if (num >= 100000000000000 && num < 1000000000000000) return 15;
    if (num >= 1000000000000000 && num < 10000000000000000) return 16;
    if (num >= 10000000000000000 && num < 100000000000000000) return 17;
    if (num >= 100000000000000000 && num < 1000000000000000000) return 18;
}
```



CS101: Introduction to Programming

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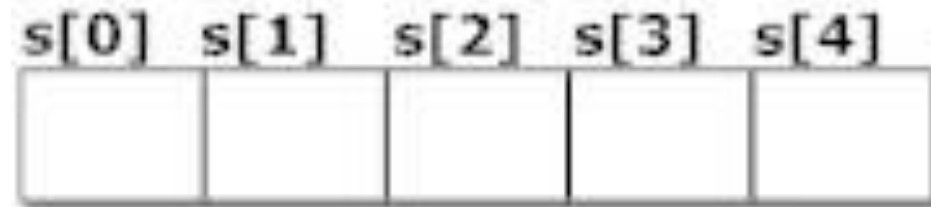
Agenda

- Arrays and Strings
 - Introduction

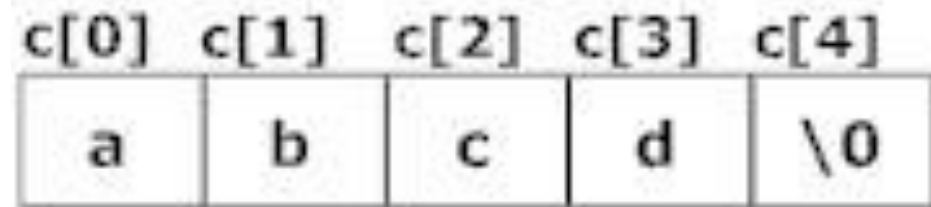
Arrays & Strings

Array

- char s[5]



- char c[] = "abcd"



- \0 is NULL character
-

How to Compare Two Strings?

- Learn to refer StackOverflow
- Use your knowledge of functions
- We will study more about string comparison in future classes.

To compare two C strings (`char *`), use `strcmp()`. The function returns `0` when the strings are equal, so you would need to use this in your code:

```
if (strcmp(name1, name2) != 0)
```

Compare Two Strings

```
1  #include <stdio.h>
2  #include <string.h>
3
4  int main()
5  {
6      char a[100], b[100];
7
8      printf("Enter any string\n");
9      scanf("%s", &a);
10
11     fflush(stdin);
12
13     printf("Enter any string\n");
14     scanf("%s", &b);
15
16     if (strcmp(a,b) == 0)
17         printf("The strings are same.\n");
18     else
19         printf("The strings are not the same.\n");
20
21     return 0;
22 }
```

How to Capture User Input with Space?

```
1  #include <stdio.h>
2  #include <string.h>
3
4  int main()
5  {
6      char a[100];
7
8      printf("Enter any string\n");
9      fgets(a, 100, stdin);
10
11     printf("Value of a = %s\n", a);
12
13     return 0;
14 }
```
