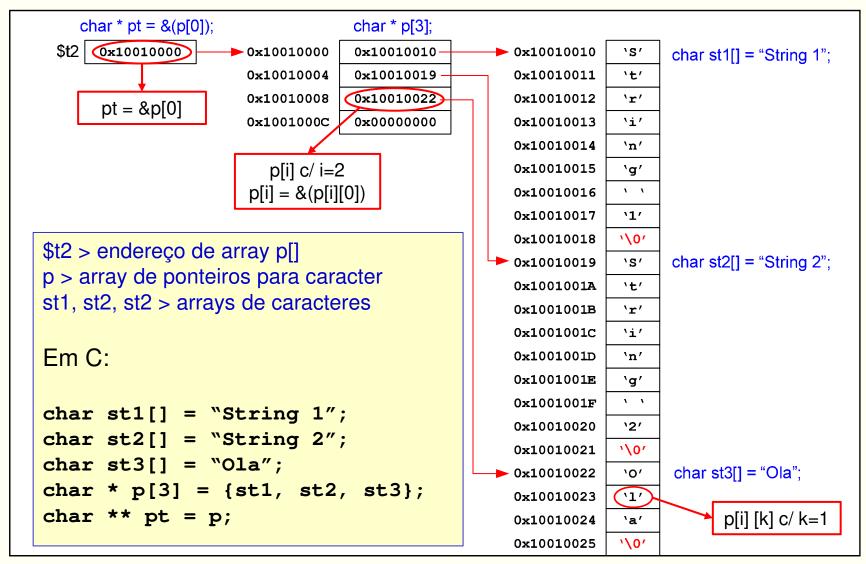
Aula prática 6

- Utilização de ponteiros em linguagem C arrays de ponteiros para caracter.
- Tradução para assembly.

Bernardo Cunha, José Luís Azevedo, Arnaldo Oliveira

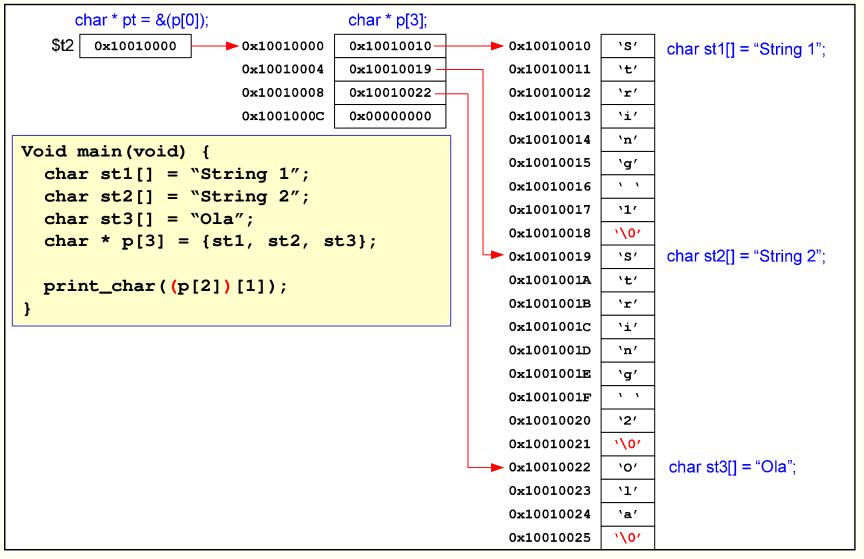


Arrays de ponteiros para caracter.





Arrays de ponteiros para caracter.



Arrays de ponteiros para caracter.

```
char * pt = &(p[0]);
                                     char * p[3];
   $t2 | 0x10010000
                       ► 0x10010000
                                      0x10010010
                                                      ► 0x10010010
                                                                     \S'
                                                                          char st1[] = "String 1";
                                      0x10010019
                         0x10010004
                                                        0x10010011
                                                                     ١t٢
                         0x10010008
                                      0x10010022
                                                        0x10010012
                                                                     ۱r'
                                      0x00000000
                                                        0x10010013
                                                                     ۱i'
                         0x1001000C
                                                        0x10010014
                                                                     'n'
Void main(void) {
                                                        0 \times 10010015
                                                                     ۱a′
  char st1[] = "String 1";
                                                        0x10010016
  char st2[] = "String 2";
                                                        0x10010017
                                                                     11'
  char st3[] = "Ola";
                                                                    1/01
                                                        0 \times 10010018
  char * p[3] = {st1, st2, st3};
                                                                          char st2[] = "String 2";
                                                       0x10010019
                                                                     \S'
                                                        0x1001001A
                                                                     \±/
  print_char((p[2])[1]);
                                                        0x1001001B
                                                                     'r'
                                                        0x1001001C
                                                                     ۱i'
main:
                                                        0x1001001D
                                                                     'n'
           $t0, p
                            # $t0 = 0x10010000
                                                        0x1001001E
                                                                     ۱a′
        $t1, 2
    1i
                            # $t1 = 2
                                                        0x1001001F
           $t1, $t1, 2
                           # $t1 = 2 * 4 = 8
    sll
    addu $t1, $t1, $t0 # $t1 = 0x10010008
                                                        0x10010020
                                                                     12'
           $t2, 0($t1)
                            # $t2 = 0x10010022
                                                                    1/01
                                                        0x10010021
    addiu $t2, $t2, 1
                            # $t2 = 0x10010023
                                                                           char st3[] = "Ola";
                                                       ► 0x10010022
                                                                     10'
           $a0, 0($t2)
                           \# $a0 = '1'
                                                        0 \times 10010023
                                                                     11'
    1i
           $v0, 11
                                                        0x10010024
                                                                     `a'
                            # print_char('l');
    syscall
                                                        0x10010025
                                                                     1/0/
```

Arrays de ponteiros para inteiros.

