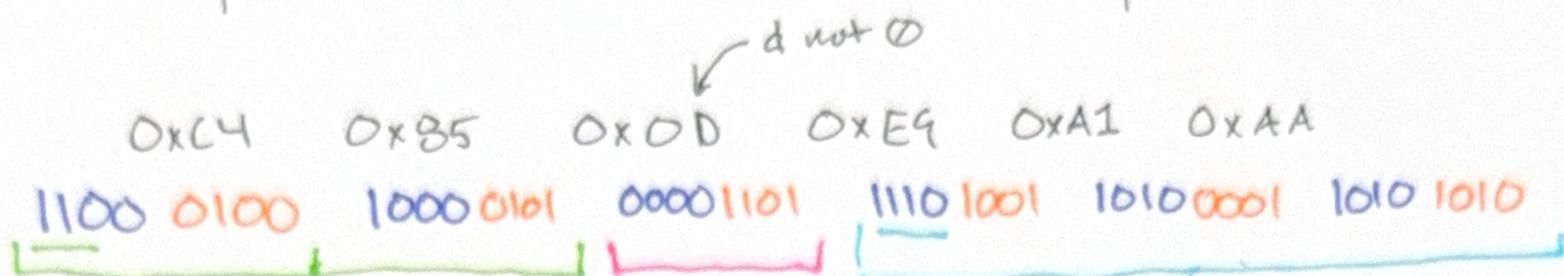


Q1: How many UTF-8 code points are encoded by



Q2: Explain in one sentence what uppercase_ascii does (on handout)

Takes a C string and changes it so lowercase ASCII chars are uppercased.

Q3: Explain in one sentence what truncate_to_n does (on handout)

Takes a C string and a length n and changes the string to be terminated after n characters.

```

1 #include <string.h>
2 #include <stdio.h>
3 #include <stdint.h>
4
5
6
7
8 void uppercase_ascii(char s[]) {
9     for(int i = 0; s[i] != '\0'; i += 1) {
10        if(s[i] >= 'a' && s[i] <= 'z') { s[i] -= 32; }
11    }
12 }
13
14
15
16
17
18 void truncate_to_n(char s[], uint32_t n) {
19     s[n] = '\0';
20 }
21
22 int main() {
23     char input[100];
24     fgets(input, 100, stdin);
25     printf("The input was: %s\n", input);
26     truncate_to_n(input, 6);
27     printf("First 6 bytes of input: %s\n", input);
28     uppercase_ascii(input);
29     printf("Input with ASCII uppercased: %s\n", input);
30 }

```

Problem Statement:

Write a program that takes an input string and prints the first 6 bytes of that string and that string with all of its lowercase ASCII characters uppercased.

What should happen according to the problem statement?

```

$ gcc analyzer.c -o analyzer
$ ./analyzer
utf8 is 🍷
The input was: utf8 is 🍷

```

First 6 bytes of input: **utf8 i**

Uppercased: **UTF8 IS 🍷**

What does happen according to this implementation?

```

$ gcc analyzer.c -o analyzer
$ ./analyzer
utf8 is 🍷
The input was: utf8 is 🍷

```

First 6 bytes of input: **utf8 i**

Uppercased: **UTF8 I**

