PRACTICE 7.4:

Explain what the following program prints:

```c
#include <stdio.h>

int main() {
   int x = 1023;
   char *p = (char *) &x;
   printf("%d %d %d %d\n", p[0], p[1], p[2], p[3]);
}
```

Explain:

The number 1023 of variable *x* will be analyzed into 4 bytes because variable *x* has data type *int*. So, 1023 will be stored in memory as

Byte 0: 255

Byte 1: 3

Byte 2: 0

Byte 3: 0

But because *char* accepts values from -128 to 127, 255 will be printed as the number -1

Therefore, the output screen will be -1 3 0 0