

```
1 // lab00, lab procedure, tasks 1 & 3
2
3 // header file
4
5 /*
6  * This file contains the declarations of the relevant functions.
7  * The implementation of each function can be found in the source file
8  * (functions.c)
9  */
10
11 // some standard libraries are already included
12 #include <stdio.h>
13 #include <stdint.h>
14
15 /* task 1
16  * The function print_bits() accepts an input of type uint16_t and has
17  * no return value (void).
18  * The function simply writes the binary and hexadecimal number of the
19  * input to the terminal.
20  */
21 void print_bits(uint16_t arg_word);
22
23 /* task 3
24  * The function bit_merge() accepts two uint16_t as inputs and combines
25  * them to a uint32_t number by merging them.
26  * The return value is a uint32_t number.
27  */
28 uint32_t bit_merge(uint16_t lsb, uint16_t msb);
29
```