

CSCI 1312 (Introduction to Programming for Engineering), Fall 2018

Quiz 1 Solution

1. (5 points) If you compile and run the following C program, what will be printed to standard output (“the screen”)?

```
#include <stdio.h>
int main(void) {
    int a = 1;
    int b = 2;
    int x = (a * a) + (b * b) + 1;
    int y = (a / b) + (a % b);
    printf("value of x is %d\n", x);
    printf("value of y is %d\n", y);
    return 0;
}
```

Solution: The following lines will be printed.

```
value of x is 6
value of y is 1
```

(For the second line, remember that / applied to two `ints` produces an integer quantity, and % computes a remainder.)

2. (5 points) Convert the decimal (base 10) number 14 to binary, octal, and hexadecimal. (You don’t have to show your work, but if your answer is wrong, your chances of getting partial credit are better if you show me how you got it. Use the back of the page if you need it.)

Solution: 14 in decimal is 1110 in binary, 16 in octal, and E in hexadecimal.