**CS2750 System programming and Tools Fall 2018**

**KEY TO** **QUIZ #7 [9 points]**

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1. [1 point] Show how to call **printf** function that will display a float variable **u** in the fixed decimal notation; left-justified in the field of size 8; two digits after the decimal point.

*Answer*:

**printf(“-8.2f\n”, u);**

1. [1 point] Show how to call **printf** function that will display an integer variable **k** right-justified in a field of size 10 with at least 5 digits.

*Answer*:

**printf(“10.5d\n”, k);**

1. [1 point] Assuming that **c** is a variable of type **char**, mark LEGAL statements in the following list:
2. *i += c*; /\* *i* has type **int** \*/ (b) *c =*2 *\* c – i*; (c) **putchar(c);** (d) **printf(c);**

*Answer:*

LEGAL statements are (a), (b) and (c).

1. [4 points] Write a definition of a function count with the following prototype:

int count(const char \* str, char ch);

This function should return the number of occurrences of a character ch in a string str.

*Answer:*

**int** count(**const char** \* str, **char** ch){

**int** m = 0;

**char** ptr = str;

**while**(\*ptr != ‘\0’)

{

**if** (ch == \*pts)

m++;

ptr++;

}

**return** m;

}

1. [2 points] The program is executed by typing a command

**runprogr one two three**

Indicate the value of **argc** and show all elements of an array **argv**.

*Answer:*

The value of **argc** is 3; see the table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **argv[0]** | **argv[1]** | **argv[2]** | **argv[3]** | **argv[4]** |
| **runprogr** | **one** | **two** | **three** | **NULL** |