# HW #10

Pdf file only, with heading:  
HW #10   
Your first Name, Your last Name  
Section No, Your MSU ID  
Due: 11:00 pm, Sunday Nov. 18, 2018 at Google Classroom

1. (10 pts) Consider the following code.

char str[20];

int x, y;

scanf(“%d%s%d”, &x, str, &y);

What will be the values of x, y and str if the user types the following:

100dogsand1 200dogsand2

1. (20 pts) What is the value of movie after each statement (lines 2-5)?

char movie[100];

strcpy(movie, “Beauty and the Beast”); /\* Line 2\*/

movie [4] = ‘\0’; /\* Line 3 \*/

strcpy(movie + 4, “!”); /\* Line 4 \*/

strcat(movie, “- Disney”); /\* Line 5 \*/

1. (30 pts) Write statements for the following. Make sure to declare any variables needed.
   1. (10 pts) Read a string called string1 from the standard input (at most 100 characters). Your string must not unnecessarily waste space.
   2. (10 pts) Create a new string by duplicating the above string1 into string2 (for example, if string 1 is knock, string 2 becomes knockknock). Your string2 must not unnecessarily waste space.
   3. (10 pts) Print the above string2 to standard output
2. (20 pts) Consider the following function:

void changeit(char \*value) {

char \*p;

for (p = value; \*p != ‘\0’; p++)

\*p = --(\*p);

puts(value);

}

(a) (10 pts) What is the output of changeit(“Monday”) ?

(b) (10 pts) What is the output of the following two statements?

char input[20] = “Monday”;   
changeit(input);

1. (20 pts) Consider the following string:

char oscarWilde[200] = “I can resist everything except temptation” ;

* (10 pts) Write a statement to print the substring starting at *everything*

* (10 pts) Write a single statement so oscarWilde ends at *everything*