CSC 215 Exam 2 Practice Questions

**Question 1:** Implement the strcpy function

**Question 2:** How many bytes are allocated? Is there anything wrong with this allocation? If so, how would you fix it?

int\* x = (int\*) malloc(12);

**Question 3:** True or false. Calling free on the same address twice is ok.

**Question 4**: What should the program below print?

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

void myfunc(char\*\* param){

++param;

}

int main(){

char\* string = (char\*)malloc(64);

strcpy(string, "hello\_World");

myfunc(&string);

myfunc(&string);

printf("%s\n", string);

return 0;

}

**Question 5:**

|  |
| --- |
| For the code below which lines should be reported as errors by a compiler?  int main(int argc, char\*\* argv){  const char\* foo = "wow"; // line 1  foo = "top"; // line 2  foo[0] = 1; // line 3  return 0;  } |

a) Line 2

b) Line 3

c) Both lines 2 and 3

d) none of the lines

**Question 6:**

|  |
| --- |
| When running the program below, the malloc statement will always be executed?  #include <stdlib.h>  #include <stdio.h>  int\* ptrToData;  int main(){  if (!ptrToData){  ptrToData = (int\*)malloc(sizeof(int) \* 10);  printf("%p\n", ptrToData);  }  free(ptrToData);  return 0;  } |

a) True, the malloc statement will always be executed

b) False, depending on how ptrToData is initialized in the machine the malloc statement might not get run.