

Mahi Berhanu
Lab 10 Post Lab

Part 1:

1.

```
#include <stdio.h>

int main() {
    char str[200] = "This is Lab 10 of System Programming";
    char dst[200];
    strcpy(dst,str); //calling function into main
    printf("%s\n", dst);
    return 0;
}

char *strcpy(char *strDest, const char *strSrc){
    while(*strSrc){
        *strDest = *strSrc; //copies what is in the source file to the destination file
        strSrc++; //increment source
        strDest++; // increment destination file
    }
    *strDest = '\0';
    return strDest;
}
```

2. This is because returning a char* will help us nest functions to functions in the string.h library.

Part 2:

1.

```
#include <stdio.h>
#include <string.h>

int main() {
    int length;
    char word[20];
    char smallest_word[20];
    char largest_word[20];
    while (strlen(word) != 4) { //loop whenever the length of
word is not equal to 4
        printf("Enter a word: \n");
        scanf("%s", word);
        if(strcmp(largest_word, word)<0) //compare largest_word to
the current word
            strcpy(largest_word,word); //if larger, copy to word
        if(strcmp(smallest_word, word)>0) //compare smallest word to
current word
            strcpy(smallest_word,word); //if smaller copy
        }
    //print values
    printf("The Smallest word is: %s \n", smallest_word);
    printf("The Largest word is: %s \n", largest_word);
    return 0;
}
```

2.

```
gdb (main)
> clang-7 -pthread -lm -o main main.c
> ./main
Enter a word:
dog
Enter a word:
zebra
Enter a word:
rabbit
Enter a word:
catfish
Enter a word:
walrus
Enter a word:
cat
Enter a word:
fish
The Smallest word is: cat
The Largest word is: zebra
> |
```

