## Lab 10 Joshua Griffith

## **PART 1:**

```
1)Write the function strcpy, don't call C string library.

char* strcpy(char* strDest, const char* strSrc)

{
 unsigned i;
 for (i=0; strSrc[i] != '\0'; ++i)
 strDest[i] = strSrc[i];
 strDest[i]='\0';
 return strDest;
}

2) Here strcpy can copy strSrc to strDest, but why we use char* as the return value of strcpy?\
```

We use char\* as the return value cpy as we can check if the function works or not by checking returning value using strcpy()==null we can determine if there is an error or not

## **PART 2:**

1) Attach the source code of your C program into the answer sheet.

```
#include<stdio.h>
#include<string.h>
#include<stdlib.h>
int main()
{
    char input[21],smallest_word[21],largest_word[21];
    printf("Enter Word : ");
    scanf("%s",input);
    strcpy(smallest_word,input);
```

```
strcpy(largest_word,input);
while(strlen(input)!=4)
{
if(strcmp(input,smallest_word)<0)</pre>
strcpy(smallest_word,input);
else if (strcmp(input,largest_word)>0)
strcpy(largest_word,input);
printf("Enter Word : ");
scanf("%s",input);
}
printf("Smallest word : %s\n",smallest_word);
printf("Largest word : %s\n",largest_word);
return 0;
}
```

2) Run the C program, attach a screenshot of the output in the answer sheet.

```
joshua@joshua-VirtualBox:~/Labs$ ./a.out
Enter Word : dog
Enter Word : zebra
Enter Word : rabbit
Enter Word : catfish
Enter Word : walrus
Enter Word : cat
Enter Word : fish
Smallest word : cat
Largest word : zebra
joshua@joshua-VirtualBox:~/Labs$
```