Part 1:

1.

char\* strCpy(char\* strDest, const char\* strSrc){

int i = 0;

while(strSrc[i] != '\0'){

strDest[i] = strSrc[i];

i++;

}

strDest[i] = '\0';

return strDest;

}

2.

We use \*char because the return type of this function is a pointer variable, which can be used to access any other string. The \* can be used to access any variable at a given address.

Part 2:

1.

#include <stdio.h>

#include <string.h>

int main(){

char input[22];

char shortest[22];

char longest[22];

printf("Enter a word: ");

scanf("%s", input);

strcpy(shortest, input);

strcpy(longest, input);

while(strlen(input) != 4){

if(strcmp(input, longest) > 0){

strcpy(longest, input);

}else if(strcmp(input, shortest) < 0){

strcpy(shortest, input);

}

printf("Enter a word: ");

scanf("%s", input);

}

printf("Shortest word is: %s\n", shortest);

printf("Longest word is: %s\n", longest);

return 0;

}

2.

