Part 1:   
1) Write the function strcpy, don't call C string library.  
Ans 1)   
  
#include <stdio.h>

char\* strcpy(char \*strDest, const char \*strSrc) {  
   int i = 0;  
   while(strSrc[i] != 0){  
       strDest[i] = strSrc[i];  
       i++;  
   }  
   strDest[i] = 0;  
   return strDest;  
}

int main() {  
   char str[100] = "Copying this";  
   char dst[100];  
   strcpy(dst, str);  
   printf("dst is %s\n", dst);  
   return 0;  
}

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

Ans2 ) We use char\* as return type for two reasons. We can just call this function within prinf() function and the destination string would be printed. Second reason being. We can check if the function returns the right value or not if it returns null. We will know something wrong within the code so an error check can also be done by keeping this as the return value.

Part 2:

Q1) Attach the source code of your C program into the answer sheet.

Ans1)

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

int main() {  
   char smallest[100], largest[100];  
   int i = 0;  
   char temp[100];  
   while(1) {  
       printf("Enter word: ");  
       scanf("%s", temp);  
       if(i == 0) {  
           strcpy(smallest, temp);  
           strcpy(largest, temp);  
       }  
       else {  
           if(strcmp(temp, smallest) < 0) {  
               strcpy(smallest, temp);  
           }  
           if(strcmp(temp, largest) > 0) {  
               strcpy(largest, temp);  
           }  
       }  
       if(strlen(temp) == 4) {  
           break;  
       }  
       i++;  
   }  
   printf("\nSmallest word: %s\n", smallest);  
   printf("Largest word: %s\n", largest);  
}

Q2) Run the C program, attach a screenshot of the output in the answer sheet.

Ans2)

