Files

1. Write a C program that accepts a string (i.e., sequence of characters) from the keyboard using the gets() function and writes that string to a file named as "test.txt" (which does not exist – if it exists, your program will overwrite) by using fputs().

A Sample Run would be as follows: Enter a string: Cng301 Algorithms and Data Structures After this program executes, your "test.txt" should have the following text: Cng301 Algorithms and Data Structures

2. Write a C program that reads a text file into an array of character (read as a string) and displays the content to the screen. You may assume that the file contains no more than 10,000 characters. Assume that your file has the following content: "Welcome to Advanced C Programming"

A Sample Run would be as follows: Array is: Welcome to Advanced C Programming

3. Show the output of the following program:

```
#include<stdio.h>
#define STRSIZ 80
int main(void)
{ char in_name[STRSIZ], out_name[STRSIZ];
FILE *inp, *outp;
char ch;
printf("Enter name of file you want to back up>");
for(scanf("%s", in_name);(inp = fopen(in_name, "r")) == NULL; scanf("%s", in_name))
{ printf("Cannot open %s for input\n", in_name);
printf("Re-enter file name>");
}
printf("Enter name for backup copy>");
for (scanf("%s", out_name);(outp = fopen(out_name, "w")) == NULL; scanf("%s",
out_name))
{ printf("Cannot open %s for output\n", out_name);
printf("Re-enter file name>");
for (ch = getc(inp); ch != EOF; ch = getc(inp))
putc(ch, outp);
fclose(inp);
fclose(outp);
printf("Copied %s to %s.\n", in_name, out_name);
return(0);
}
```