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1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <errno.h>
4  #include <string.h>
5
6  int main()
7  {
8      //opens file and checks for error
9      FILE *fptr;
10     if((fptr = fopen("../Project_Part_5/bin/Debug/Project_Part_5.exe", "rb")) == NULL)
11     {
12         printf("Error opening input file\n");
13         exit(1);
14     }
15     //set cursor to 0;
16     fseek(fptr, 0, SEEK_SET);
17
18     //variables for reading and printing
19     unsigned char byte[2];
20     char charline[16];
21     //variables for initializing progress through file
22     int line = 0;
23     int end = 0;
24     int value;
25     int endCursor = 0;
26     //loop till end of file
27     while(end != 1)
28     {
29         //reset default character line
30         strcpy(charline, ".....");
31         //print offset into file
32         printf("%-10.8x ", line);
33         //loop for 16 bytes each line
34         for(int cursor = 0; cursor < 16; cursor++)
35         {
36             //read next byte if end of file set flag
37             if(fread(byte, sizeof(unsigned char), 1, fptr) != 1)
38             {
39                 endCursor = cursor;
40                 cursor = 16;
41                 end = 1;
42                 continue;
43             }
44             //send byte to index in character line if printable
45             if(isprint(byte[0]) != 0) charline[cursor] = byte[0];
46             //print byte
47             printf(" %02x", byte[0]);
48             if(cursor == 7) printf(" ");
49         }
50         //Formatting for end of file
51         if(end == 1)
52             for (int spaces = 0; spaces < 16-endCursor; spaces++)
53                 printf(" ");
54         //at end of 16 byte line print character line
55         printf(" [%s]\n", charline);
56         //increment file index
57         line = line + 16;
58     }
59     //close file and exit
60     fclose(fptr);
61     return 0;
62 }
63

```