Course	COMP-8567	July 15, 2020
Instructor	Dr. B. Boufama	
Assignment	05	
Due date	July 25, 11.59pm	

Using system calls, *fork(), wait(), open(), close(), read() and write()*, write a C program to code a sentence by inversing it, character-wise . Your program should follow the sequential steps, given below.

- Prompts the message "This program encodes text",
- Gets in an infinite loop then
  1. Writes the message "Enter a sentence, e.g., Good morning sir, my name is BigFoot",
  2. Use "read()" to read the whole input line,
  3. Forks and
     - the parent writes the message "Created a child to perform task, waiting...", then calls *wait()* to wait for its child.
     - the child process calls the function *childFunction(char *)* and never returns.
  4. The child, through *childFunction(char *line)*,
     - writes the message "I am a child working for my parent"
     - encodes the input line, for example the above sentence becomes "tooFgiB si eman ym ,ris gninrom doog",
     - in case of an empty line, the child calls *exit(10)*,
     - opens the file called *codes.txt*, for writing and truncates it, to get rid of old contents,
     - writes the encoded line in *codes.txt*, then closes the file.
     - calls *exit(0)*
  5. Once the child terminates, the parent checks the returned status value and if it is 10, writes on the screen "Empty line" and goes back to 1.
  6. Otherwise, the parent opens file *codes.txt* for reading and reads the encoded line, prints it on the screen, closes *codes.txt* and goes back to 1.

Important: All reads/writes must be done using *read()/write()*