CECS 524 Unit 1 Assignment 1

Name: Spuritha Mudireddy

CSULB ID: 030743269

1. Write, in the programming language of your choice, an interpreter for Brainfu\*k. It is very  
simple, on the order of a late first semester of programming assignment. Did mine in Java, about 60 lines of code. Run it with this input below - what is the output?

++++++++[>++++[>++>+++>+++>+<<<<-]>+>+>->>+[<]<-]>>.>---.+++++++..+++.>>.<-.<.  
+++.------.--------.>>+.>++.

**Code:**

package Unit1;

import java.io.BufferedReader;

import java.io.IOException;

import java.io.InputStreamReader;

public class BrainF {

public static void main(String[] args) throws IOException

{

byte b[]=new byte[30000];

int dp=0;

BufferedReader rd = new BufferedReader(

new InputStreamReader(System.in));

String input = rd.readLine();

int p=0;

for(int i=0;i<input.length();i++)

{

switch(input.charAt(i))

{

case '>':

dp++;

break;

case '<':

dp--;

break;

case '+':

b[dp]++;

break;

case '-':

b[dp]--;

break;

case '.':

System.out.print((char)b[dp]);

break;

case ',':

b[dp]=(byte)(rd.readLine().charAt(0));

break;

case '[':

if (b[dp] == 0)

{

i++;

while (p> 0 || input.charAt(i) != ']')

{

if (input.charAt(i) == '[')

p++;

else if (input.charAt(i) == ']')

p--;

i ++;

}

}

break;

case ']':

if (b[dp] != 0)

{

i--;

while (p > 0 || input.charAt(i) != '[')

{

if (input.charAt(i) == ']')

p ++;

else if (input.charAt(i) == '[')

p --;

i--;

}

i --;

}

}

}

}

}

**Output:**

Graphical user interface, text, application

Description automatically generated