Jeremy Rio-Martinez

Comsc 265

Assignment 18

Data Structures – Create a stack.

**Declare a structure called Item. It should Store a letter of the alphabet and have a previous pointer.**

struct item

{

char letter;

item\* prev;

};

**Declare a pointer variable called Top.**

int main()

{

item \*Top = NULL;

return 0;

}

**Create a function ‘isEmpty’ that check to see if the stack is empty. It should returns either True or False.**

bool isEmpty()

{

return (top==NULL) ? true:false;

}

**Create a function called ‘push’ that adds a letter to the top of the stack. Create ‘new’ item dynamically..**

void push(char l)

{

item\* temp = new item;

temp->letter = l;

temp -> prev = top;

top = temp;

}

**Create a function called ‘pop’ that returns and removes the top item on the stack. Do not forget to ‘delete’**

char pop()

{

item\* temp = top;

top = temp ->prev ;

char l = temp -> letter;

delete temp;

return l;

}

**Use pointers.**