1. Stacks
Assume that you have a class `Stack` with methods `push(item)`, `pop()`, and `is_empty()`. Use a `Stack` to implement your solution to the problem below.

Write a function `is_balanced(text, lsym, rsym)` that takes three string arguments `text`, `lsym`, and `rsym` and returns `True` if `text` is balanced with respect to the strings `lsym` and `rsym` and `False` otherwise.

For example,

```python
is_balanced("(a + b) * 3 + 8 * (j + 4)", "("", ")")
  returns  True
```

```python
is_balanced("[4, 6,[8, 2],[3, ]", "[", "]")
  returns  False
```
2. List comprehensions

a) What is the value of the following expression?

\[
[ [y \times y] \text { for } y \text { in range}(4)]
\]

b) Given a list \texttt{alist}, use a list comprehension to create a list consisting of the elements of \texttt{alist} in the even numbered positions. Example: if

\texttt{alist = \[1,2,3,4,5,6\]}

your list comprehension should create the list

\texttt{[1, 3, 5]}