CS:1210 Quiz 9 Version (b)

You have 15 minutes to complete this quiz. Please put away your books, notes, and all electronic devices

Suppose that list L equals `[["This", ["is", "a"]], "nested", ["list", "with"], ["several", [["different"]]], ["levels", "of"], "nesting"]`. Evaluate these list comprehensions. The first 5 parts of worth 1 point each and the remaining 5 are worth 2 points each.

(a) `[str(x).replace("1", "8") for x in range(101, 111)]`

(b) `[str(x).split("0") for x in range(105, 111)]`

(c) `[x[1] for x in L if len(x)%2 == 0 and type(x) == list]`

(d) `[list(range(sum(range(x))))[::-1][:2] for x in range(5, 9, 2)]`

(e) `[x[::-1][1] for x in L[:4]]`

(f) `[[x for x in range(4)] for y in range(4)]`

(g) `[y for x in L for y in x if type(x) == list and type(y) == str]`

(h) `[y for x in [range(z+1) for z in range(4)] for y in x]`

(i) `[i for i in range(len(L)) if len(L[i]) == i]`

(j) `[x*y for x in L for y in range(len(x)) if type(x) == str and y < 3]`