CS324 Quiz #11 NAME:-----------KEY---------

1) Read the following definition of common-lisp function "FOO": **(10 pts)**

```
(defun   FOO (X  Y)  (cond     (       (null X)                    nil                         )
                               (  ( >  Y (car  X))   (cons    Y  (FOO  (cdr  X)  Y     ))   )
                               (          t           (cons  (car X)  (FOO (cdr  X)  Y   ))   )
                     )
 )
```

Evaluate the **system output** for the following s-expression (call of FOO); if the call to FOO is **invalid** s-expression then just write "**ERROR**":

(FOO '(11 40 88 15 40 2 100 40 20) 40)

system output --> -------------**(40 40 88 40 40 40 100 40 40)**----------------

2) Read the following definition of common-lisp function "FOO": **(+10 correct / -10 incorrect pts)**

```
(defun   FOO (X  Y)  (cond     (       (null X)                    nil                           )
                               (  ( equal  Y (car  X))        (FOO  (cdr  X)  Y     )            )
                               (          t                   (cons  (car X)  (FOO (cdr  X)  Y)) )
                     )
 )
```

Evaluate the **system output** for the following s-expression (call of FOO); if the call to FOO is **invalid** s-expression then just write "**ERROR**":

(FOO '(11 40 88 15 40 2 100 40 20) 40)

system output --> --------------------------**(11 88 15 2 100 20)**---------------------------