**Access to LINDO in UB Computer Labs:**

***Remember that always click on ”ALLOW”***

**1. You may go to my Home Page and click on *Citrix* under your course OPRE315.**

**OR**

**1. *Click on:***

[**https://citrix.ubalt.edu**](https://webmail.ubalt.edu/owa/redir.aspx?C=4af9dbb760984beeac193adac74d4bc6&URL=https%3a%2f%2fcitrix.ubalt.edu%2fCitrix%2fXenApp%2fauth%2flogin.aspx)

**Click on “INSTALL” while check “I agree box”**

**It ask for your UB ID**

**“Installation is completed successfully”**

**Click on “Run”**

**Now you should have access to LIND.**

**1. Setting up a sample model to be solved by LINDO** (for ease in editing you should work in word.doc environment, not LINDO yet)

***An illustrative numerical example:*** The carpenter's problem

*Maximize 5 XT + 3 XC*

*Subject to:*

*2 XT + XC ≤ 40 labor constraint*

*XT + 2 XC ≤ 50 material constraint,*

*and both XT, XC are non-negative, i.e.* *XT≥ 0, XC≥0.*

First *format this model for LINDO*. It will be almost the same with minor Editing:

*Max 5XT + 3XC*

*S. T.*

*2 XT + XC < 40*

*XT + 2 XC < 50*

*End*

LP OPTIMUM FOUND AT STEP 2

OBJECTIVE FUNCTION VALUE

1) 110.0000

VARIABLE VALUE REDUCED COST

XT 10.000000 0.000000

XC 20.000000 0.000000

ROW SLACK OR SURPLUS DUAL PRICES

2) 0.000000 2.333333

3) .000000 0.333333

NO. ITERATIONS= 2

RANGES IN WHICH THE BASIS IS UNCHANGED

***(In fact it means Range for the change in the Objective Function Coefficient for which the Optimal Solution remain unchanged)***

OBJ COEFFICIENT RANGES (

VARIABLE CURRENT ALLOWABLE ALLOWABLE

COEF INCREASE DECREASE

XT 5.000000 1.000000 3.500000

XC 3.000000 7.000000 0.500000

RIGHTHAND SIDE RANGES

***(In fact it means Range for the change on the RHS of the constraint for which its Shadow Price remain unchanged)***

ROW CURRENT ALLOWABLE ALLOWABLE

RHS INCREASE DECREASE

2 40.000000 60.000000 15.000000

3 50.000000 30.000000 30.000000

Thus, the optimal solution for the problem is: ***XT = 10*** and ***XC = 20***, with a corresponding optimal objective-function value of **$110**. Interpretation of the remaining information in the output will be discussed in the classroom.