Assignment 2

1.Solve the following problems by using Simplex method

Maximize, $Z = 5m+6p$

Subject to,

$2m+p \leq 4$

$m+2p \leq 4$

and $m \geq 0$, $p \geq 0$

2. Solve the following problems by using Simplex method

Maximize, $Z = t + n$

Subject to,

$2t+n \leq 4$

$t+2n \leq 3$

and $t \geq 0$, $n \geq 0$

3. Solve the following problems by using Simplex method

Maximize, $Z = 3x+2q$

Subject to,

$x \leq 4$

$x +3q \leq 15$

$2x+q \leq 10$

and $x \geq 0$, $q \geq 0$

4. Solve the following problems by using Simplex method

Maximize, $Z = 6x_1+x_2+4x_3$

Subject to,

$3x_1+7x_2+x_3 \leq 15$

$x_1-2x_2+3x_3 \leq 20$

and $x_1 \geq 0$, $x_2 \geq 0$, $x_3 \geq 0$