# Assignment Two for CS-6648

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$$\textbf{Maximize } 24x_1 + 2x_2 + 20x_3 + 4x_4 \tag{1}$$

$$\textbf{Subject to } 8x_1 + 1x_2 + 5x_3 + 4x_4 \leq 9 \tag{2}$$

$$x_i \in \{0, 1\} \textbf{ for } i = 1 \textbf{ to } 4. \tag{3}$$

**From above we can get:**

$$24/8 = 3$$
$$2/1 = 2$$
$$20/5 = 4$$
$$4/4 = 1$$

| item | 1 | 2 | 3 | 4 |
|------|-----|-----|-----|-----|
| value/lb. | \$3 | \$2 | \$4 | \$1 |