Selecting Investment Portfolio:

Formula for Calculating Return : (P\*g) + D

Where P= price of stock

g= growth rate

D= Dividend

Decision Variables:

X1,x2,x3,x4,x5,x6,x7,x8

Returns on x1=(40\*0.05)+2=4

X2=6.5,x3=5.9,x4=5.4,x5=5.15,x6=10,x7=8.4,x8=6.25

Objective Function:

Max Z= 4 x1+6.5 x2+5.9 x3+5.4 x4+5.15 x5+10 x6+8.4 x7+6.25 x8

Constraints:

40x1 +50x2 +80x3 +60x4 +45x5 +60x6 +30x7 +25x8 <=2500000;

40 x1 + 50 x2 + 80 x3 <=1000000;

60 x4 + 45 x5 + 60 x6 <=1000000;

30 x7 + 25 x8 <=1000000;

//Invest atleast 40 percent

40 x1 >=100000;

50 x2 >=100000;

80 x3 >=100000;

60 x4 >=100000;

45 x5 >=100000;

60 x6 >=100000;

30 x7 >=100000;

25 x8 >=100000;

int x1, x2, x3, x4, x5, x6, x7, x8;