```
alpha = .8
alpha = 0.8000
beta = .95
beta = 0.9500
a=1-alpha;
b=1-beta;
P1=[ 1-a a];
P2=[b 1-b];
P=[P1;P2];
n=8;
P^n
ans = 2 \times 2
   0.2801
           0.7199
   0.1800
           0.8200
1/(a+b)*[b a;b a] + (1-a-b)^n/(a+b)*[a -a;-b b]
ans = 2 \times 2
   0.2801
            0.7199
   0.1800
            0.8200
```