**Question 6 – Isabel Walter**

Starting situation: α = 0.1 θ0 = 1 θ1 = 0.5

θ0 = θ0 – 0.1 \* (1/4) (( 1 + ½ \* 3 – 2) \* 1 + ( 1 + ½ \* 1 – 2) \* 1 + ( 1 + ½ \* 0 – 1) \* 1 + ( 1 + ½ \* 4 – 3) \* 1 ) = 1

θ1 = θ1 – 0.1 \* (1/4) (( 1 + ½ \* 3 – 2) \* 3 + ( 1 + ½ \* 1 – 2) \* 1 + ( 1 + ½ \* 0 – 1) \* 0 + ( 1 + ½ \* 4 – 3) \* 4 ) = 0.475

θ0 = θ0 – 0.1 \* (1/4) (( 1 + 0.475 \* 3 – 2) \* 1 + ( 1 + 0.475 \* 1 – 2) \* 1 + ( 1 + 0.475 \* 0 – 1) \* 1 + ( 1 + 0.475 \* 4 – 3) \* 1 ) = 1.005

θ1 = θ1 – 0.1 \* (1/4) (( 1 + 0.475 \* 3 – 2) \* 3 + ( 1 + 0.475 \* 1 – 2) \* 1 + ( 1 + 0.475 \* 0 – 1) \* 0 + ( 1 + 0.475 \* 4 – 3) \* 4 ) = 0.46625