Compsci 367 A2 Task 5

Hasnain Cheena

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# Table of Results

## Parsed with column specification:  
## cols(  
## expanded = col\_double(),  
## solved = col\_logical(),  
## type = col\_character(),  
## elapsed\_time = col\_double(),  
## NoQueens = col\_double()  
## )

## method X..of.queens Probability.of.solving  
## 1 hill climbing 8 16.4  
## 2 hill climbing with sideways moves 8 43.2  
## 3 random restart hill climbing 8 99.6  
## 4 hill climbing 9 14.8  
## 5 hill climbing with sideways moves 9 44.8  
## 6 random restart hill climbing 9 99.0  
## 7 hill climbing 10 8.6  
## 8 hill climbing with sideways moves 10 27.2  
## 9 random restart hill climbing 10 87.4  
## Average.time.to.solve....std.dev Average...of.nodes.expanded....std.dev  
## 1 0.008 ± 0.003 4 ± 0.9  
## 2 0.191 ± 0.164 86.8 ± 74.2  
## 3 0.057 ± 0.052 26.6 ± 24.6  
## 4 0.015 ± 0.004 4.5 ± 1  
## 5 0.291 ± 0.257 84.5 ± 74.3  
## 6 0.102 ± 0.091 30.3 ± 27.3  
## 7 0.025 ± 0.006 5 ± 1  
## 8 0.585 ± 0.348 113.1 ± 67.1  
## 9 0.333 ± 0.246 66.4 ± 49.1

#Discussion of results

a)how you think the number of expanded nodes, the amount of time, and the probability will change as the number of queens increased

1. how you determined the number of queens to run
2. how you determined the number of problems you need to run for each of them