1. **Command Line Inputs:**

python3 DPLL.py mapcolor.cnf +UCH -t transcripts/results\_mapcolor.UCH.txt

|  |  |
| --- | --- |
| **CNF File** | mapcolor.cnf |
| **Model Output:** | Q\_Blue V\_Blue T\_Blue SA\_Green WA\_Blue NT\_Red NSW\_Red |
| **# of DPLL Calls, no UCH** | 36 |
| **# of DPLL Calls, with UCH** | 22 |

1. **Command Line Inputs:**

python3 DPLL.py mapcolor.cnf Q\_Green +UCH -t transcripts/results\_mapcolor2.txt

|  |  |
| --- | --- |
| **CNF File** | mapcolor.cnf |
| **Model Output:** | Q\_Green V\_Green T\_Blue SA\_Blue WA\_Green NT\_Red NSW\_Red |
| **# of DPLL Calls, no UCH** | 171 |
| **# of DPLL Calls, with UCH** | 33 |

1. **Command Line Inputs:**

python3 DPLL.py mapcolor.cnf Q\_Green V\_Blue +UCH -t transcripts/results\_mapcolor3.UCH.txt

|  |  |
| --- | --- |
| **CNF File** | mapcolor.cnf |
| **Model Output:** | - MODEL WAS UNSATISFIABLE - |
| **# of DPLL Calls, no UCH** | 141 |
| **# of DPLL Calls, with UCH** | 17 |

1. **Command Line Inputs:**

python3 DPLL.py sammy.cnf O1Y O2W O3Y L1W L2Y L3B +UCH -t transcripts/results\_sammy\_scenarioA.UCH.txt

|  |  |
| --- | --- |
| **CNF File** | sammy.cnf |
| **Model Output:** | C1B O1Y C2W O2W C3Y O3Y L2Y L1W L3B |
| **# of DPLL Calls, no UCH** | 34 |
| **# of DPLL Calls, with UCH** | 19 |

1. **Command Line Inputs:**

python3 DPLL.py sammy.cnf O1W O2Y O3W L1W L2B L3B +UCH -t transcripts/results\_sammy\_scenarioB.UCH.txt

|  |  |
| --- | --- |
| **CNF File** | sammy.cnf |
| **Model Output:** | C1B O1W C2Y O2Y C3W O3W L1W L2B L3B |
| **# of DPLL Calls, no UCH** | 34 |
| **# of DPLL Calls, with UCH** | 19 |

1. **Command Line Inputs:**

python3 DPLL.py 3queens.cnf +UCH -t transcripts/3queens.UCH.txt

|  |  |
| --- | --- |
| **CNF File** | 3queens.cnf |
| **Model Output:** | - MODEL WAS UNSATISFIABLE - |
| **# of DPLL Calls, no UCH** | 37 |
| **# of DPLL Calls, with UCH** | 25 |

1. **Command Line Inputs:**

python3 DPLL.py 4queens.cnf +UCH -t transcripts/4queens.UCH.txt

|  |  |
| --- | --- |
| **CNF File** | 4queens.cnf |
| **Model Output:** | Q12 Q24 Q31 Q43 |
| **# of DPLL Calls, no UCH** | 29 |
| **# of DPLL Calls, with UCH** | 17 |

1. **Command Line Inputs:**

python3 DPLL.py 5queens.cnf +UCH -t transcripts/5queens.UCH.txt

|  |  |
| --- | --- |
| **CNF File** | 5queens.cnf |
| **Model Output:** | Q12 Q24 Q31 Q43 Q55 |
| **# of DPLL Calls, no UCH** | 46 |
| **# of DPLL Calls, with UCH** | 26 |

1. **Command Line Inputs:**

python3 DPLL.py 6queens.cnf +UCH -t transcripts/6queens.UCH.txt

|  |  |
| --- | --- |
| **CNF File** | 6queens.cnf |
| **Model Output:** | Q12 Q24 Q36 Q41 Q53 Q65 |
| **# of DPLL Calls, no UCH** | 119 |
| **# of DPLL Calls, with UCH** | 47 |