

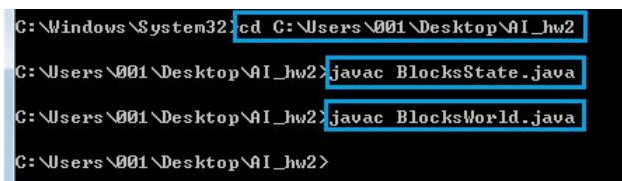
## Programing Assignment #2 - README

CSCE 625 - Artificial Intelligence  
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1. The source code I turned in are named "BlocksState.java" and "BlocksWorld.java". Open a Command Prompt, enter the folder where "BlocksState.java" and "BlocksWorld.java" are located. Compile with command "javac BlocksState.java" and "javac BlocksWorld.java"(shown in Figure 1). Files named "BlocksState.class" and "BlocksWorld.class" should be generated(shown in Figure 2).



```
C:\Windows\System32>cd C:\Users\001\Desktop\AI_hw2
C:\Users\001\Desktop\AI_hw2>javac BlocksState.java
C:\Users\001\Desktop\AI_hw2>javac BlocksWorld.java
C:\Users\001\Desktop\AI_hw2>
```

Figure 1

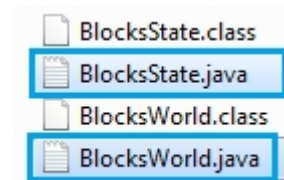
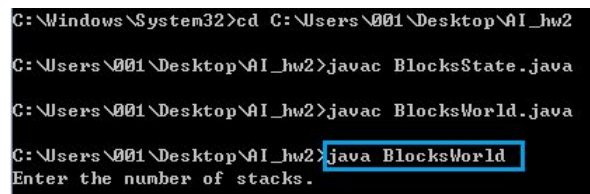


Figure 2

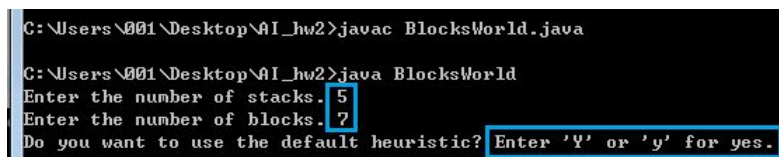
2. Then run with command "java BlocksWorld"(shown in Figure 3).



```
C:\Windows\System32>cd C:\Users\001\Desktop\AI_hw2
C:\Users\001\Desktop\AI_hw2>javac BlocksState.java
C:\Users\001\Desktop\AI_hw2>javac BlocksWorld.java
C:\Users\001\Desktop\AI_hw2>java BlocksWorld
Enter the number of stacks.
```

Figure 3

3. Then you enter the number of stacks and the number of blocks(shown in Figure 4).



```
C:\Users\001\Desktop\AI_hw2>javac BlocksWorld.java
C:\Users\001\Desktop\AI_hw2>java BlocksWorld
Enter the number of stacks. 5
Enter the number of blocks. 7
Do you want to use the default heuristic? Enter 'Y' or 'y' for yes.
```

Figure 4

4. Then you can choose if use the default heuristic(number of blocks out of place). If you type 'Y' or 'y', the default heuristic is chosen(shown in Figure 5), if you type other character, my heuristic is chosen(shown in Figure 6).

```

Do you want to use the default heuristic? Enter 'Y' or 'y' for yes. y
Use the default heuristic.
initial state:
1 :
2 : A G
3 : F D B
4 : E
5 : C
depth: 0, heuristic: 7
success! depth=9, total_goal_tests=240, max_queue_size=1275
1 :
2 : A G
3 : F D B
4 : E
5 : C
depth: 0, heuristic: 7
1 :
2 : A
3 : F D B
4 : E G
5 : C
depth: 1, heuristic: 7

```

Figure 5

```

Do you want to use the default heuristic? Enter 'Y' or 'y' for yes. n
initial state:
1 : G E
2 : D A C
3 : F B
depth: 0, heuristic: 10
success! depth=14, total_goal_tests=634, max_queue_size=940
1 : G E
2 : D A C
3 : F B
depth: 0, heuristic: 10
1 : G E
2 : D A C B
3 : F
depth: 1, heuristic: 11
1 : G
2 : D A C B
3 : F E
depth: 2, heuristic: 10

```

Figure 6

5. Then results will both shown summary in this window(Figure 5, 6), and create a detailed file named "BlocksWorld.txt"(shown in Figure 7). If the file named "BlocksWorld.txt" already exists, the new result will be appended, not erase the original content.

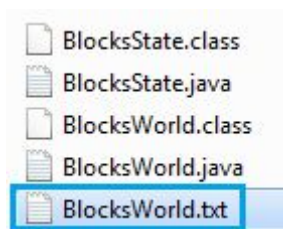


Figure 7