

```

1  Compiler is using classPath = '[C:\Users\88017\Desktop\COSC-3P71, C:
   \Users\88017\Documents\ASSIGN1\everyintothe pool.jar, C:
   \Users\88017\Downloads\drjava-beta-20190813-220051 (1).jar]'; bootClassPath =
   'null'
2  Please choose the dimension of chess board
3  Note: The dimension can only be 8 as per chess rules.
4  8
5  Game Starts
6  Please choose the depth of search you want to do for minimax algorithm in AI class
7  Note: The depth value should be greater than 15 for human vs AI Game
8  17
9  Please choose the Ply Level in our AI class
10 0:Easy
11 1:Medium
12 2:Hard
13 2
14 R K B Q I B K R
15 P P P P P P P P
16 - - - - - - - -
17 - - - - - - - -
18 - - - - - - - -
19 - - - - - - - -
20 p p p p p p p p
21 r k b q i b k r
22 Please choose whether do you want to play with human or computer
23 0:Human Vs. Human
24 1:Human Vs. Computer
25 Any Other Number:Exit
26 0
27 Please choose one of the moves in chess board=white
28 0:King
29 1:Queen
30 2:Knight
31 3:Bishop
32 4:Pawn
33 5:Rook
34 6:Surrender
35 7:User guide
36 4
37 Please choose number of steps
38 1
39 Please choose which pawn piece to move(white)
40 1 2 3 4 5 6 7 8
41 4
42 Please choose the direction in which you want the pawn 4 to move(white)
43 0:Move Diagonally Forward on the Left
44 1:Move Diagonally Forward on the Right
45 2:Move Forward
46 3:Enpassant
47 3
48 R K B Q I B K R
49 P P P - P P P P
50 - - - - - - - -
51 - - - P - - - -
52 - - - - - - - -
53 - - - - - - - -
54 p p p p p p p p
55 r k b q i b k r
56 Please choose another move in chess board=black
57 0:King
58 1:Queen
59 2:Knight
60 3:Bishop
61 4:Pawn
62 5:Rook
63 6:Surrender
64 7:User guide
65 4
66 -----
67 Please choose number of steps

```

```

68 1
69 Please choose which pawn piece to move(black)
70 1 2 3 4 5 6 7 8
71 3
72 Please choose the direction in which you want the pawn piece to move(black)
73 0:Move Diagonally Forward on the Left
74 1:Move Diagonally Forward on the Right
75 2:Move Forward
76 3:Enpassant
77 3
78 R K B Q I B K R
79 P P P - P P P P
80 - - - - - - -
81 - - - P - - - -
82 - - p - - - - -
83 - - - - - - -
84 p p - p p p p p
85 r k b q i b k r
86 Please choose one of the moves in chess board=white
87 0:King
88 1:Queen
89 2:Knight
90 3:Bishop
91 4:Pawn
92 5:Rook
93 6:Surrender
94 7:User guide
95 4
96 Please choose number of steps
97 1
98 Please choose which pawn piece to move(white)
99 1 2 3 4 5 6 7 8
100 5
101 Please choose the direction in which you want the pawn 5 to move(white)
102 0:Move Diagonally Forward on the Left
103 1:Move Diagonally Forward on the Right
104 2:Move Forward
105 3:Enpassant
106 2
107 R K B Q I B K R
108 P P P - - P P P
109 - - - - P - - -
110 - - - P - - - -
111 - - p - - - - -
112 - - - - - - -
113 p p - p p p p p
114 r k b q i b k r
115 Please choose another move in chess board=black
116 0:King
117 1:Queen
118 2:Knight
119 3:Bishop
120 4:Pawn
121 5:Rook
122 6:Surrender
123 7:User guide
124 1
125 -----
126 Please choose number of steps
127 3
128 Please choose the direction in which you want the queen piece to move(black)
129 0:Move Diagonally Forward on the Left
130 1:Move Diagonally Forward on the Right
131 2:Move Diagonally Downward on the Left
132 3:Move Diagonally Downward on the Right
133 4:Move Forward
134 5:Move Downward
135 6:Move Left
136 7:Move Right
137 0

```

```

138 R K B Q I B K R
139 P P P - - P P P
140 - - - - P - - -
141 - - - P - - - -
142 q - p - - - - -
143 - - - - - - - -
144 p p - p p p p p
145 r k b - i b k r
146 Please choose one of the moves in chess board=white
147 0:King
148 1:Queen
149 2:Knight
150 3:Bishop
151 4:Pawn
152 5:Rook
153 6:Surrender
154 7:User guide
155 1
156 Please choose number of steps
157 3
158 Please choose the direction in which you want the queen piece to move(white)
159 0:Move Diagonally Forward on the Left
160 1:Move Diagonally Forward on the Right
161 2:Move Diagonally Downward on the Left
162 3:Move Diagonally Downward on the Right
163 4:Move Forward
164 5:Move Downward
165 6:Move Left
166 7:Move Right
167 1
168 R K B - I B K R
169 P P P - - P P P
170 - - - - P - - -
171 - - - P - - Q -
172 q - p - - - - -
173 - - - - - - - -
174 p p - p p p p p
175 r k b - i b k r
176 Please choose another move in chess board=black
177 0:King
178 1:Queen
179 2:Knight
180 3:Bishop
181 4:Pawn
182 5:Rook
183 6:Surrender
184 7:User guide
185 4
186 -----
187 Please choose number of steps
188 1
189 Please choose which pawn piece to move(black)
190 1 2 3 4 5 6 7 8
191 8
192 Please choose the direction in which you want the pawn piece to move(black)
193 0:Move Diagonally Forward on the Left
194 1:Move Diagonally Forward on the Right
195 2:Move Forward
196 3:Enpassant
197 3
198 R K B - I B K R
199 P P P - - P P P
200 - - - - P - - -
201 - - - P - - Q -
202 q - p - - - - p
203 - - - - - - - -
204 p p - p p p p -
205 r k b - i b k r
206 Please choose one of the moves in chess board=white
207 0:King

```

```

208 1:Queen
209 2:Knight
210 3:Bishop
211 4:Pawn
212 5:Rook
213 6:Surrender
214 7:User guide
215 4
216 Please choose number of steps
217 1
218 Please choose which pawn piece to move(white)
219 1 2 3 4 5 6 7 8
220 8
221 Please choose the direction in which you want the pawn 8 to move(white)
222 0:Move Diagonally Forward on the Left
223 1:Move Diagonally Forward on the Right
224 2:Move Forward
225 3:Enpassant
226 3
227 R K B - I B K R
228 P P P - - P P -
229 - - - - P - - -
230 - - - P - - Q P
231 q - p - - - - p
232 - - - - - - - -
233 p p - p p p p -
234 r k b - i b k r
235 Please choose another move in chess board=black
236 0:King
237 1:Queen
238 2:Knight
239 3:Bishop
240 4:Pawn
241 5:Rook
242 6:Surrender
243 7:User guide
244 2
245 -----
246 Please choose number of steps
247 1
248 Please decide which rook you want to choose
249 0:Left Black Knight
250 1:Right Black Knight
251 1
252 Please choose the direction in which you want the knight piece to move(white)
253 0:Move Diagonally Forward on the Left
254 1:Move Diagonally Forward on the Right
255 2:Move Diagonally backward on the Left
256 3:Move Diagonally backward on the Right
257 1
258 R K B - I B K R
259 P P P - - P P -
260 - - - - P - - -
261 - - - P - - Q P
262 q - p - - - - p
263 - - - - - - - k
264 p p - p p p p -
265 r k b - i b - r
266 Please choose one of the moves in chess board=white
267 0:King
268 1:Queen
269 2:Knight
270 3:Bishop
271 4:Pawn
272 5:Rook
273 6:Surrender
274 7:User guide
275 2
276 Please choose number of steps
277 1

```

```

278 Please decide which rook you want to choose
279 0:Left White Knight
280 1:Right White Knight
281 1
282 Please choose the direction in which you want the knight piece to move(white)
283 0:Move Diagonally Forward on the Left
284 1:Move Diagonally Forward on the Right
285 2:Move Diagonally backward on the Left
286 3:Move Diagonally backward on the Right
287 1
288 R K B - I B - R
289 P P P - - P P -
290 - - - - P - - K
291 - - - P - - Q P
292 q - p - - - p
293 - - - - - k
294 p p - p p p p -
295 r k b - i b - r
296 Please choose another move in chess board=black
297 0:King
298 1:Queen
299 2:Knight
300 3:Bishop
301 4:Pawn
302 5:Rook
303 6:Surrender
304 7:User guide
305 4
306 -----
307 Please choose number of steps
308 1
309 Please choose which pawn piece to move(black)
310 1 2 3 4 5 6 7 8
311 6
312 Please choose the direction in which you want the pawn piece to move(black)
313 0:Move Diagonally Forward on the Left
314 1:Move Diagonally Forward on the Right
315 2:Move Forward
316 3:Enpassant
317 2
318 R K B - I B - R
319 P P P - - P P -
320 - - - - P - - K
321 - - - P - - Q P
322 q - p - - - p
323 - - - - - p - k
324 p p - p p - p -
325 r k b - i b - r
326 Please choose one of the moves in chess board=white
327 0:King
328 1:Queen
329 2:Knight
330 3:Bishop
331 4:Pawn
332 5:Rook
333 6:Surrender
334 7:User guide
335 3
336 Please choose number of steps
337 1
338 Please decide which rook you want to choose
339 0:Left White Bishop
340 1:Right White Bishop
341 1
342 Please choose the direction in which you want the bishop piece to move(white)
343 0:Move Diagonally Forward on the Left
344 1:Move Diagonally Forward on the Right
345 2:Move Diagonally backward on the Left
346 3:Move Diagonally backward on the Right
347 0

```

```

348 R K B - I - - R
349 P P P - B P P -
350 - - - P - - K
351 - - - P - - Q P
352 q - p - - - p
353 - - - - p - k
354 p p - p p - p -
355 r k b - i b - r
356 Please choose another move in chess board=black
357 0:King
358 1:Queen
359 2:Knight
360 3:Bishop
361 4:Pawn
362 5:Rook
363 6:Surrender
364 7:User guide
365 4
366 -----
367 Please choose number of steps
368 1
369 Please choose which pawn piece to move(black)
370 1 2 3 4 5 6 7 8
371 6
372 Please choose the direction in which you want the pawn piece to move(black)
373 0:Move Diagonally Forward on the Left
374 1:Move Diagonally Forward on the Right
375 2:Move Forward
376 3:Enpassant
377 2
378 R K B - I - - R
379 P P P - B P P -
380 - - - P - - K
381 - - - P - - Q P
382 q - p - - p - p
383 - - - - - k
384 p p - p p - p -
385 r k b - i b - r
386 Please choose one of the moves in chess board=white
387 0:King
388 1:Queen
389 2:Knight
390 3:Bishop
391 4:Pawn
392 5:Rook
393 6:Surrender
394 7:User guide
395 0
396 Please choose number of steps
397 1
398 Please choose the direction in which you want the king piece to move
399 0:Move Diagonally Forward on the Left
400 1:Move Diagonally Forward on the Right
401 2:Move Diagonally Downward on the Left
402 3:Move Diagonally Downward on the Right
403 4:Move Forward
404 5:Move Downward
405 6:Move Left
406 7:Move Right
407 8:Do Castling
408 8
409 R K B - - R I -
410 P P P - B P P -
411 - - - P - - K
412 - - - P - - Q P
413 q - p - - p - p
414 - - - - - k
415 p p - p p - p -
416 r k b - i b - r
417 Please choose another move in chess board=black

```

```

418 0:King
419 1:Queen
420 2:Knight
421 3:Bishop
422 4:Pawn
423 5:Rook
424 6:Surrender
425 7:User guide
426 1
427 -----
428 Please choose number of steps
429 4
430 Please choose the direction in which you want the queen piece to move(black)
431 0:Move Diagonally Forward on the Left
432 1:Move Diagonally Forward on the Right
433 2:Move Diagonally Downward on the Left
434 3:Move Diagonally Downward on the Right
435 4:Move Forward
436 5:Move Downward
437 6:Move Left
438 7:Move Right
439 1
440 R K B - q R I -
441 P P P - B P P -
442 - - - P - - K
443 - - - P - - Q P
444 - - p - - p - p
445 - - - - - - k
446 p p - p p - p -
447 r k b - i b - r
448 Please choose one of the moves in chess board=white
449 0:King
450 1:Queen
451 2:Knight
452 3:Bishop
453 4:Pawn
454 5:Rook
455 6:Surrender
456 7:User guide
457 4
458 Please choose number of steps
459 1
460 Please choose which pawn piece to move(white)
461 1 2 3 4 5 6 7 8
462 1
463 Please choose the direction in which you want the pawn 1 to move(white)
464 0:Move Diagonally Forward on the Left
465 1:Move Diagonally Forward on the Right
466 2:Move Forward
467 3:Enpassant
468 2
469 R K B - q R I -
470 - P P - B P P -
471 P - - - P - - K
472 - - - P - - Q P
473 - - p - - p - p
474 - - - - - - k
475 p p - p p - p -
476 r k b - i b - r
477 Please choose another move in chess board=black
478 0:King
479 1:Queen
480 2:Knight
481 3:Bishop
482 4:Pawn
483 5:Rook
484 6:Surrender
485 7:User guide
486 1
487 -----

```

```

488 Please choose number of steps
489 1
490 Please choose the direction in which you want the queen piece to move(black)
491 0:Move Diagonally Forward on the Left
492 1:Move Diagonally Forward on the Right
493 2:Move Diagonally Downward on the Left
494 3:Move Diagonally Downward on the Right
495 4:Move Forward
496 5:Move Downward
497 6:Move Left
498 7:Move Right
499 7
500 R K B - - q I -
501 - P P - B P P -
502 P - - - P - - K
503 - - - P - - Q P
504 - - p - - p - p
505 - - - - - - k
506 p p - p p - p -
507 r k b - i b - r
508 Please choose one of the moves in chess board=white
509 0:King
510 1:Queen
511 2:Knight
512 3:Bishop
513 4:Pawn
514 5:Rook
515 6:Surrender
516 7:User guide
517 4
518 Please choose number of steps
519 1
520 Please choose which pawn piece to move(white)
521 1 2 3 4 5 6 7 8
522 2
523 Please choose the direction in which you want the pawn 2 to move(white)
524 0:Move Diagonally Forward on the Left
525 1:Move Diagonally Forward on the Right
526 2:Move Forward
527 3:Enpassant
528 2
529 R K B - - q I -
530 - - P - B P P -
531 P P - - P - - K
532 - - - P - - Q P
533 - - p - - p - p
534 - - - - - - k
535 p p - p p - p -
536 r k b - i b - r
537 Please choose another move in chess board=black
538 0:King
539 1:Queen
540 2:Knight
541 3:Bishop
542 4:Pawn
543 5:Rook
544 6:Surrender
545 7:User guide
546 1
547 -----
548 Please choose number of steps
549 1
550 Please choose the direction in which you want the queen piece to move(black)
551 0:Move Diagonally Forward on the Left
552 1:Move Diagonally Forward on the Right
553 2:Move Diagonally Downward on the Left
554 3:Move Diagonally Downward on the Right
555 4:Move Forward
556 5:Move Downward
557 6:Move Left

```



```
558 7:Move Right
559 7
560 R K B - - - q -
561 - - P - B P P -
562 P P - - P - - K
563 - - - P - - Q P
564 - - p - - p - p
565 - - - - - - k
566 p p - p p - p -
567 r k b - i b - r
568 Checkmate. Black king wins!!!
```