Chinese Dark Chess

Content

Download Java

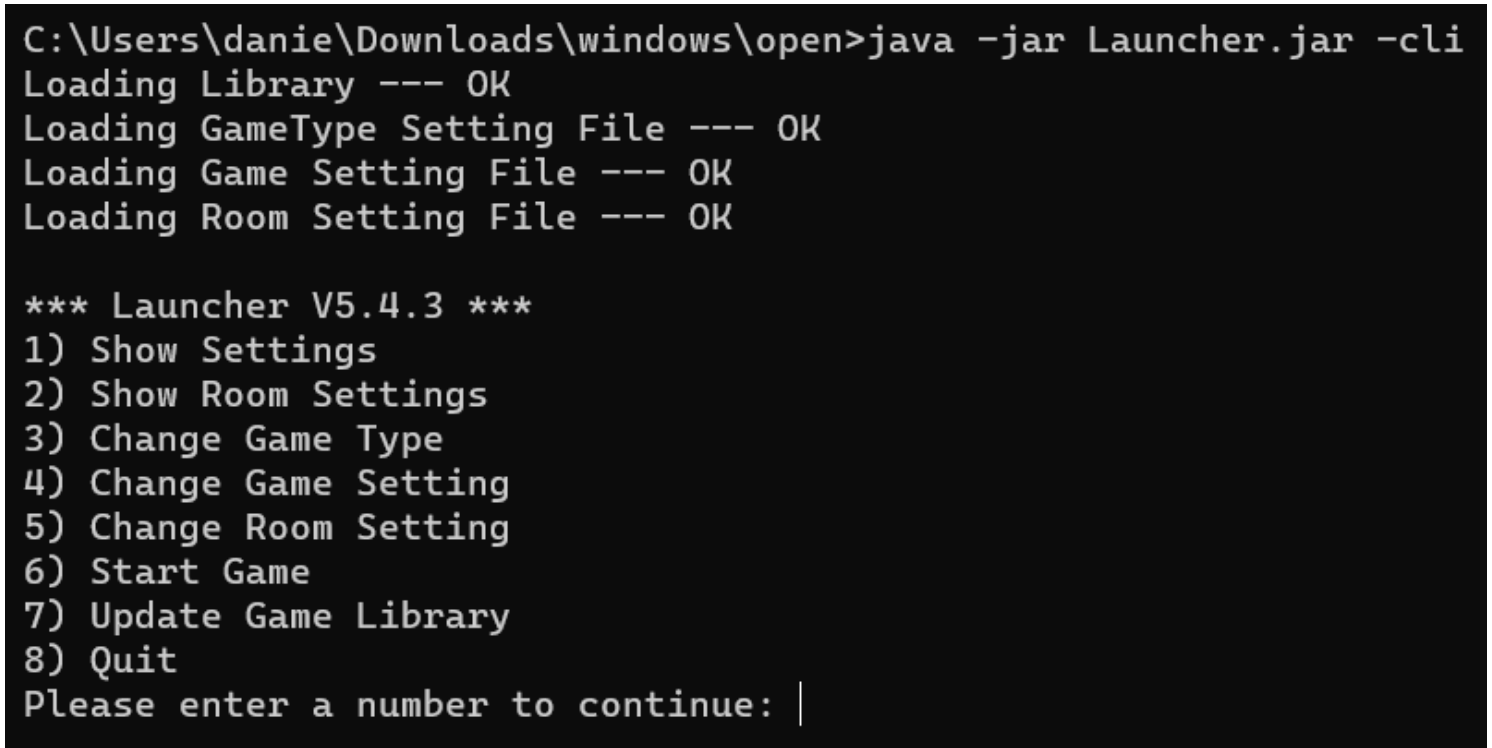
https://dev.java/

Download Chinese Dark Chess Platform

- Windows
  - http://120.126.195.84/Data/CDC_windows10_20220103_5_4_3.zip
- Ubuntu
  - http://120.126.195.84/Data/CDC_ubuntu1804_20220103_5_4_3.zip

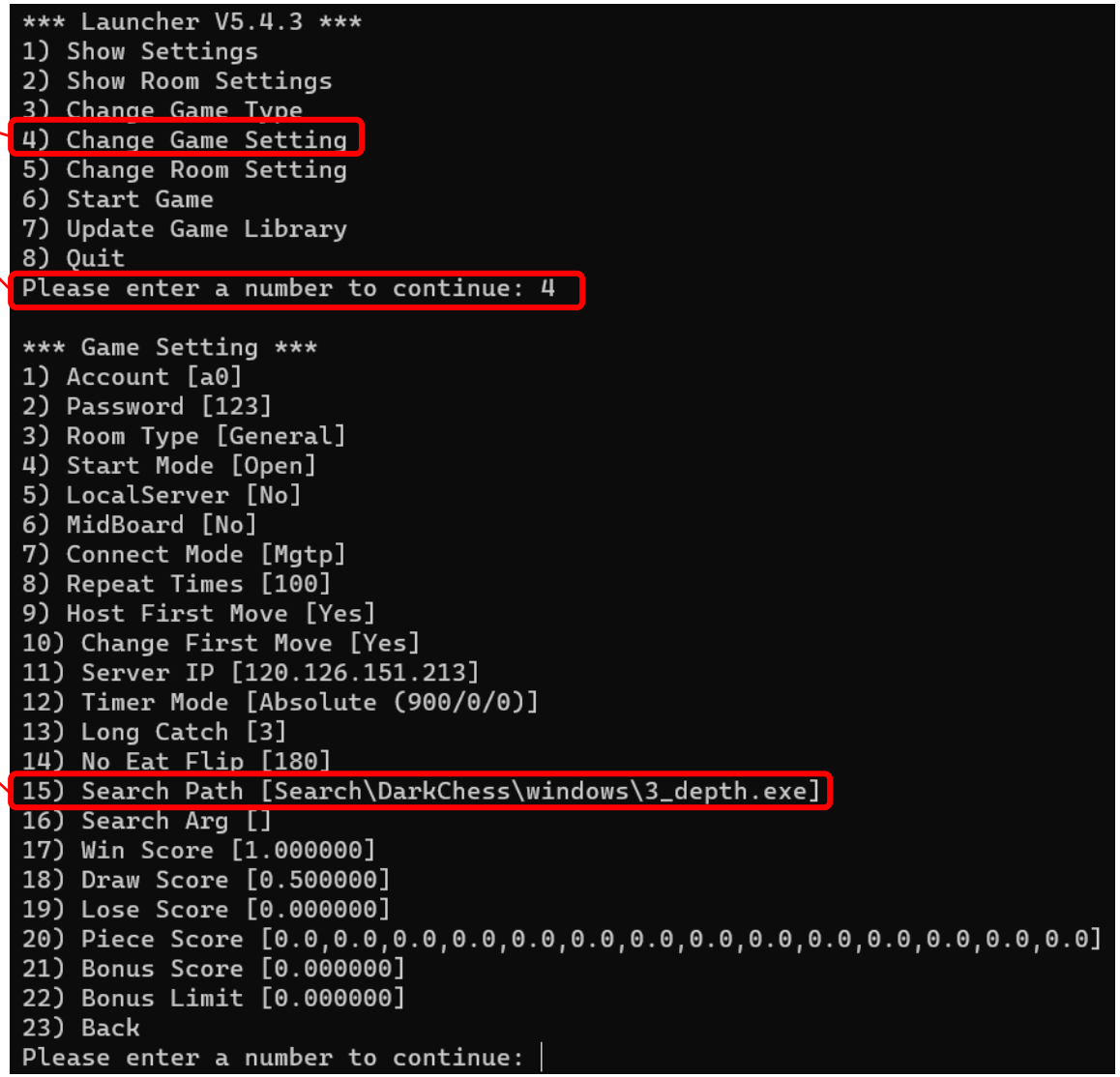
How to open the game room

1. Unzip CDC_windows10_20220103_5_4_3.zip
2. Go to /windows/open
3. Open cmd and input java -jar Launcher.jar -cli



Play in General mode process (Open Room)

1. Input 4 Change Game Setting
2. Account : a0 ~ a20000
3. Password : 123
4. Setting your AI path
    1. Input 15 and enter your path
5. Back
6. Start Game



Play in General mode process (Open Room)

```
*** Launcher V5.4.3 ***
1) Show Settings
2) Show Room Settings
3) Change Game Type
4) Change Game Setting
5) Change Room Setting
6) Start Game
7) Update Game Library
8) Quit
Please enter a number to continue: 6

*** Start Game ***
Start Search...
Path: Search\DarkChess\windows\3_depth.exe
[Client Send: 1 name]
1 name
=1 MyAI
=1 MyAI
[Client Recv: 1 MyAI]
[Client Send: 2 version]
2 version
=2 1.0.0
=2 1.0.0
[Client Recv: 2 1.0.0]
Login...
Create Room...
Waiting for another player...
```

Play in General mode process (Enter Room)

1. Go to /windows/enter and run java -jar Launcher.jar –cli
2. Input 4 Change Game Setting
3. Account : a0 ~ a20000
4. Password : 123
5. Setting your AI path
   - Input 15 and enter your path
6. Back
6. Start Game

```
C:\Users\danie\Downloads\windows\enter>java -jar Launcher.jar -cli
Loading Library --- OK
Loading GameType Setting File --- OK
Loading Game Setting File --- OK
Loading Room Setting File --- OK

*** Launcher V5.4.3 ***
1) Show Settings
2) Show Room Settings
3) Change Game Type
4) Change Game Setting
5) Change Room Setting
6) Start Game
7) Update Game Library
8) Quit
Please enter a number to continue: 4

*** Game Setting ***
1) Account [a1]
2) Password [123]
3) Room Type [General]
4) Start Mode [Enter]
5) LocalServer [No]
6) Connect Mode [Mgtp]
7) Server IP [120.126.151.213]
8) Search Path [Search\DarkChess\windows\3_depth.exe]
9) Search Arg []
10) Back
Please enter a number to continue:
```

Play in General mode process (Enter Room)

- Enter Index to enter the game

```
*** Start Game ***
Start Search...
Path: Search\DarkChess\windows\3_depth.exe
[Client Send: 1 name]
1 name
=1 MyAI
=1 MyAI
[Client Recv: 1 MyAI]
[Client Send: 2 version]
2 version
=2 1.0.0
=2 1.0.0
[Client Recv: 2 1.0.0]
Login...
Enter Room...

| Index | Room ID  | Room State | Host | isHuman | MidBoard | Round | FirstMove | ChangeFirst | Time | PlyTimeLimit | GroupPly | Num of Repetition | NoEatFlip |
|   1   | 23489554 |  Waiting   |  a0  |   NO    |    NO    |  100  |    YES    |     YES     | 900  |      0       |    0     |         3         |    180    |

Room Index (1 ~ 1) [-1: reload]:
```

Play in Contest mode process

1. Go to /windows/open or /windows/enter and run java -jar Launcher.jar –cli
2. Enter Change Game Setting
3. Setting Account, Password, Room Type and Search Path
   - Account and Password is your Program Name
   - Room Type is Contest
   - Search Path is your AI path

Play in Contest mode process

- Start Game and waiting Contest room Create

```
*** Launcher V5.4.3 ***
1) Show Settings
2) Show Room Settings
3) Change Game Type
4) Change Game Setting
5) Change Room Setting
6) Start Game
7) Update Game Library
8) Quit
Please enter a number to continue: 4

*** Game Setting ***
1) Account [Yahari]
2) Password [Yahari]
3) Room Type [Contest]
4) Connect Mode [Mgtp]
5) Server IP [120.126.151.213]
6) Search Path [Search\DarkChess\windows\3_depth.exe]
7) Search Arg []
8) Back
Please enter a number to continue:
```

Add Multiple Games Text Protocol (MGTP) to your program to connect to the game platform

- http://120.126.195.84/Data/Other/DarkChess/sample_code.zip
- You can refer to MGTP sample code

Add Multiple Games Text Protocol (MGTP) to your program to connect to the game platform

Id	Command Name	Command Explain	**Input Parameter**	**Sample Platform Input [Id** Command Name **Parameter]**	**Output Parameter**	**Sample Your Program Output [=Id Return]**
0	protocol_version	Return MGTP Version	NULL	0 protocol_version\n	MGTP Version	=0 1.0.0\n
1	name	Return AI Name	NULL	1 name\n	Return AI Name	=1 Yahari\n
2	version	Return AI Version	NULL	2 version\n	Return AI Version	=2 5.13.2\n
3	known_command	Whether to support this command	<command>	3 known_command name\n	true or false	=3 true\n
4	list_commands	list supported commands	NULL	4 list_commands\n	<command> <command> …	=4 protocol_version\nName\n…

Add Multiple Games Text Protocol (MGTP) to your program to connect to the game platform

Id	Command Name	Command Explain	**Input Parameter**	**Sample Platform Input** [**Id** Command Name **Parameter**]	**Output Parameter**	**Sample Your Program Output [=Id Return]**
5	quit	request program termination	NULL	5 quit\n	NULL	=5\n
6	boardsize	set board size	<row> <column>	6 boardsize 8 4\n	NULL	=6\n
7	reset_board	reset board	NULL	7 reset_board\n	NULL	=7\n
8	num_repetition	Set the maximum number of board repeats	<number>	8 num_repetition 3\n	NULL	=8\n
9	num_moves_to_draw	Set the maximum number of no-eating flips	<number>	9 num_moves_to_draw 180\n	NULL	=9\n

Add Multiple Games Text Protocol (MGTP) to your program to connect to the game platform

Id	Command Name	Command Explain	**Input Parameter**	**Sample Platform Input [Id** Command Name **Parameter]**	**Output Parameter**	**Sample Your Program Output [=Id Return]**
10	move	Return move	<from> <dst>	10 move a1 a2\n	NULL	=10\n

8	a8	b8	c8	d8
7	a7	b7	c7	d7
6	a6	b6	c6	d6
5	a5	b5	c5	d5
4	a4	b4	c4	d4
3	a3	b3	c3	d3
2	a2	b2	c2	d2
1	a1	b1	c1	d1
	a	b	c	d

board position code

Add Multiple Games Text Protocol(MGTP) to your program to connect to the game platform

Id	Command Name	Command Explain	Input Parameter	Sample Platform Input [Id Command Name Parameter]	Output Parameter	Sample Your Program Output [=Id Return]
11	flip	Return Flip	<location> <piece>	11 flip a3 G\n	NULL	=11\n

8	a8	b8	c8	d8
7	a7	b7	c7	d7
6	a6	b6	c6	d6
5	a5	b5	c5	d5
4	a4	b4	c4	d4
3	a3	b3	c3	d3
2	a2	b2	c2	d2
1	a1	b1	c1	d1
	a	b	c	d

board location code

color	King	Guard	Minister	Rook	Knight	Canon	Pawn
Red	K	G	M	R	N	C	P
Black	k	g	m	r	n	c	p

Dark chess	Empty chess
X	–

Piece code

Add Multiple Games Text Protocol (MGTP) to your program to connect to the game platform

Id	Command Name	Command Explain	Input Parameter	Sample Platform Input [Id Command Name Parameter]	Output Parameter	Sample Your Program Output [=Id Return]
12	genmove	AI generate move	<color>	12 genmove black\n	<from> <dst>	=12 c5 c6\n

8	a8	b8	c8	d8
7	a7	b7	c7	d7
6	a6	b6	c6	d6
5	a5	b5	c5	d5
4	a4	b4	c4	d4
3	a3	b3	c3	d3
2	a2	b2	c2	d2
1	a1	b1	c1	d1
	a	b	c	d

board location code

- Color : red, black or unknown.(unknown color is first ply)
- Give up : =12 a0 a0
- Flip : =12 a1 a1
- Move : =12 c5 c6

color	King	Guard	Minister	Rook	Knight	Canon	Pawn
Red	K	G	M	R	N	C	P
Black	k	g	m	r	n	c	p
Dark chess				Empty chess			
X				–			

Piece code

Add Multiple Games Text Protocol (MGTP) to your program to connect to the game platform

Id	Command Name	Command Explain	**Input Parameter**	**Sample Platform Input** [**Id** Command Name **Parameter**]	**Output Parameter**	**Sample Your Program Output [=Id Return]**
13	game_over	Return game result	<result> Result express winner. red, black or draw.	13 game_over red\n	NULL	=13\n
14	ready	Ask if ready	NULL	14 ready\n	NULL	=14\n
15	time_settings	Set time	<time> (ms)	15 time_settings 900000\n	NULL	=15\n
16	time_left	Return remaining time	<color> <time> color is red or black	16 time_left black 899999\n	NULL	=16\n
17	showboard	Print Board	NULL	17 showboard\n	<board>	=17 XXXX\nXXXX…

Add Multiple Games Text Protocol (MGTP) to your program to connect to the game platform

Id	Command Name	Command Explain	**Input Parameter**	**Sample Platform Input** [**Id** Command Name **Parameter**]	**Output Parameter**	**Sample Your Program Output [=Id Return]**
18	init_board	The initial is the designated board	<board> <remain_pieces> <first_color>	18 init_board ...\n	NULL	=18\n

- <board> : It is the codes of 32 chess pieces on the board, all separated by spaces, from top left to bottom right, first to right and then to bottom, for example: X P X K k p g X ....
- <remain_pieces> : It is the number of each type of chess that is alive (including unflip) on the chessboard, the order is KGMRNCPkgmrncp, all separated by spaces, for example: 1 1 2 2 2 1 4 1 1 2 2 2 1 4.
- <first_color> : It is the color of the first player, one of red, black and unknown, for example: red.
- The above parameter <board>, parameter <remain_pieces> and parameter <first_color> are also separated by spaces.

Observation and Game Record

- Observation : http://120.126.195.84/observation.html#
- Game Record : http://120.126.195.84/game_record.php

Contest Results Website

Connect State	Index	Name	Rank	Big	Small
Connected	1	711083120	1	1.5	0.5
Disconnected	2	baseline	2	0.5	1.5

- "Big" column represents score, win point +1, draw point +0.5, loss point +0
- "Small" colume represents the sum of the opponent's points
- If the big colume is the same, the higher the Small colume, the higher the rank