# Main method

**Main method start**

Get the threads quantity to run. Then open base game text file

**Basegame file opened correctly?** — No → **ABORT**

Yes ↓

Read the file and save its lines into a game_t* record used as base game

**Basegame record filled?** — No → **ABORT**

Yes ↓

Close the file

Check if threads quantity is major than game columns, if so set the threads quantity to game columns

Create a shared data record containing best games matrix of size high enough to contain all threads best games with their depth

Create a private data record containing base game, best score for the thread, number of threads, its thread number, a pointer to shared data, and a boolean vector to flag when a game must be saved into best games record

. . . . .

Compute init and end cols to iterate, according to block mapping

For column into init and end, and for every rotation

Allocate the figure for level 0 in the actual column and rotation

Execute find_best_score method for level 1

**save_best_game[0] is True?** — No → Remove the figure

Yes ↓

Save best game for level 0 →

Remove the figure

Destroy game 0 clone

Wait for all the threads to complete their job

Get the thread with the best score

**Save best games for detected thread with best scores into txt files and destroy all the memory allocated variables**

# find_best_score method

**Clone current level game**

**Deepest level reached?**

No → For every column and every rotation

Yes → Compute score for current game → **Score < Best score?**

Yes → Set save_best_game True for all levels and replace the best score → **Destroy current level clone and return score**

For every column and every rotation ↓

Allocate the figure for current level in the corresponding column and rotation

Execute find_best_score method for next level

**save_best_game flag for current level == True**

No → Remove the figure

Yes → Save best game for current level →

Remove the figure ↓

**More columns and rotations?**

Yes → Allocate the figure for current level in the corresponding column and rotation

No → **Destroy current level clone and return score**