

# HW6

- ▶ Filename: HW#\_StuID.zip
  - Ex) HW6\_Q123456.zip

# HW6

- ▶ Coloretto (變色龍)
- ▶ Requirements:
  - Write a program which lets users play Coloretto
  - Use only basic rules
  - Write an AI to play Coloretto as a phantom user
  - Number of players: 4
- ▶ Bonus:
  - Number of players: 3–5

# HW6

- ▶ There are 77 cards including:
  - Each color have 9 coloretto (7x9=63)
  - There are 10 “+2” card (the score +2)
  - There are 3 colorful coloretto (can act any color)
  - 1 end cards, put at the no 16 counter count.

# HW6

- ▶ In each round, the player can only choose:
  - Draw a coloretto and put at some row
  - Get the coloretto on a row and end this round
- ▶ Each row can only put 3 coloretto and each row can only get by one player at each round.
- ▶ If someone draw a end card, then after this round we will calculate the score.

# HW6

- ▶ The score calculation is shown below:
  - Sort the count of each colors, the top 3 colors get positive points, others get minus points
  - The different count get different point:
    - 1 : 1
    - 2 : 3
    - 3 : 6
    - 4 : 10
    - 5 : 15
    - 6 or more : 21

# HW6

- For example the sorted count is 654321, +2card 2, colorful 1, the score is  $21+21+10 - 6 - 3 - 1 + 2 \times 2$ .
- ▶ The highest score player is winner!

# HW6

- ▶ Rules:

- <http://goo.gl/YuslhT>

- ▶ Play online:

- [http://www.marquand.net/games\\_coloretto/](http://www.marquand.net/games_coloretto/)
- <http://www.marquand.net/coloretto>

- ▶ Video:

- <https://www.youtube.com/watch?v=CHIL-Ff32dY>
- [https://www.youtube.com/watch?v=\\_huhDSJDnQE](https://www.youtube.com/watch?v=_huhDSJDnQE)