
```
1 def isValidCard(card: str) -> bool:
2     valid_cards = ['A', '2', '3', '4', '5', '6', '7', '8', '9', '10', 'J', 'Q', 'K']
3     return card in valid_cards
4
5 def validInput(cards: list) -> bool:
6     validflag = True
7     for card in cards:
8         if not isValidCard(card):
9             validflag = False
10            break
11    return validflag
12
13 def transferPoint(card: str) -> float:
14     poker = ['A', '2', '3', '4', '5', '6', '7', '8', '9', '10', 'J', 'Q', 'K']
15     point = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 0.5, 0.5, 0.5]
16     index = poker.index(card)
17     return point[index]
18
19 def justPoint(point: float) -> float:
20     if point > 10.5:
21         return 0
22     else:
23         return point
24
25 def deal(myPoint: float, card: str) -> float:
26     myPoint += transferPoint(card)
27     myPoint = justPoint(myPoint)
28     return myPoint
```

```

29
30 def winner(playerPoint: float, computerPoint: float) -> str:
31     if playerPoint > computerPoint:
32         return 'player win ' + str(playerPoint) + ' ' + str(computerPoint)
33     elif playerPoint < computerPoint:
34         return 'computer win ' + str(playerPoint) + ' ' + str(computerPoint)
35     else:
36         return 'tie ' + str(playerPoint)
37
38 def game(playerCards: list, computerCards: list) -> str:
39     if validInput(playerCards) and validInput(computerCards):
40         playerPoint = transferPoint(playerCards[0])
41         computerPoint = transferPoint(computerCards[0])
42         playerIndex, computerIndex = 1, 1
43         playerBust, computerBust = False, False
44         while playerIndex < len(playerCards) and playerBust == False:
45             playerPoint = deal(playerPoint, playerCards[playerIndex])
46
47             if playerPoint == 0:
48                 playerBust = True
49             else:
50                 playerIndex += 1
51         while computerIndex < len(computerCards) and computerBust == False:
52             computerPoint = deal(computerPoint, computerCards[computerIndex])
53             if computerPoint == 0:
54                 computerBust = True
55             else:
56                 computerIndex += 1
57         return winner(playerPoint, computerPoint)
58     else:
59         return 'Error input'
60
61 def inputData() -> list:
62     playerCardsStr = input()
63     computerCardsStr = input()
64     playerCards = playerCardsStr.split()
65     computerCards = computerCardsStr.split()
66     return playerCards, computerCards
67
68 def testgame():
69     playerCards, computerCards = inputData()
70     result = game(playerCards, computerCards)
71     print(result)
72
73 if __name__ == '__main__':
74     testgame()

```

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D:\文件\school\計算機程式設計\HW\unittest>python tester.py

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Ran 11 tests in 0.001s

OK

Name	Stmts	Miss	Branch	BrPart	Cover
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poker.py	59	9	22	1	88%
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TOTAL	59	9	22	1	88%
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