

Hong Kong Baptist University
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Associate Degree Program

CS2114
Computer Programming I
(51)

User Guide
(NIM GAME)

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Contact

1. The Main Menu
2. Game Mode
3. Before The Game Started
4. Playing The Game
5. To Save
6. To Load
7. To Quit

1. The Main Menu

```

Welcome
      To
      Nim
Let's Have Fun!

1> Human vs Computer.
2> Human vs Human.
3> How To Play.
4> Credit.
0> Exit.
Please tell me what is your choice. 1

```

At first, to start the programme, it is recommended to start with **administrator mode** in windows 7/8, otherwise the programme will occur the permission error when creating game saving on C drive. The programme shows the welcome screen and 5 options to the user.

1. Human vs. Computer (1 Player mode)
2. Human vs. Human (2 Players mode)
3. How To Play (The rules of this game)
4. Credit (The information of the programme writer)
0. Exit (Shut down the game)

User just needs to give the number for controlling the programme.

2. Game Mode

```
1> Human vs Computer.
2> Human vs Human.
3> How To Play.
4> Credit.
0> Exit.
Please tell me what is your choice. 1

1> Standard game
2> Ascending game
3> Random game
4> Load from save
0> Return to main menu
Which game mode do you want? _

1> Human vs Computer.
2> Human vs Human.
3> How To Play.
4> Credit.
0> Exit.
Please tell me what is your choice. 2

1> Standard game
2> Ascending game
3> Random game
4> Load from save
0> Return to main menu
Which game mode do you want? _
```

When user chose to play with computer or another player, the programming will give another 5 options for asking about the game mode.

1. Standard game (3 sets, which are 3,4 and 5.)
2. Ascending game (n is given by player, if n is 6, there will be 6 set, which are 1, 2, 3, 4, 5 and 6. In addition, the range of n should between 5 and 20.)
3. Random game (random sets and the number of each set are also random by computer. In addition, the range of random number is from 5 to 20.)
4. Load from save (It will mention in the part 7 in this user guide.)
0. Return to the main menu

3. Before The Game Started

```
1> Standard game
2> Ascending game
3> Random game
4> Load from save
0> Return to main menu
Which game mode do you want? 1

Hey player, please give me your name :
```

Before the start of the game, the programme will ask for the name of the player.

```
1> Standard game
2> Ascending game
3> Random game
4> Load from save
0> Return to main menu
Which game mode do you want? 1

Hey player1, please give me your name : LEO
Hey player2, please give me your name : KONG
```

If user chose the mode Human vs. Human, the programme will ask both player1 and player2 to enter their name.

```
Which game mode do you want? 1

Hey player, please give me your name : LEO

1> Easy
2> Difficult
0> Return to main menu
Your Choice:
```

After entering the name, **ONLY** the mode Human vs. Computer, will see this screen. User can choose the different level of computer. The computer in Difficult level is smarter than the Easy level.

4. Playing The Game

```
Set 1 have 3      000
Set 2 have 4      0000
Set 3 have 5      00000

!!Set number = 0 to save the game!!
LEO, Please enter the set number: 1
LEO, Please enter the take number: 2
LEO take 2 from set 1
Set 1 have 1      0
Set 2 have 4      0000
Set 3 have 5      00000

COM take 5 from Set 3
Set 1 have 1      0
Set 2 have 4      0000
Set 3 have 0
```

The game is started after choosing the level. Firstly, the game programme will show the current status of each set. User should enter the set number first, and then the take number. Secondly, the programme will show how much the user taken from which set and the updated status of each set. Thirdly, the programme will also show the action of computer and the most updated status of each set.

```
Set 1 have 3      000
Set 2 have 4      0000
Set 3 have 5      00000

!!Set number = 0 to save the game!!
LEO, Please enter the set number: 1
LEO, Please enter the take number: 2
LEO take 2 from set 1
Set 1 have 1      0
Set 2 have 4      0000
Set 3 have 5      00000

KONG, Please enter the set number: 1
KONG, Please enter the take number: 1
KONG take 1 from set 1
Set 1 have 0
Set 2 have 4      0000
Set 3 have 5      00000
```

For the Human vs. Human, it is all most the same. Firstly, the game programme will show the current status of each set. User (Player1) should enter the set number first, and then the take number. Secondly, the programme will show how much the user(Player1) taken from which set and the updated status of each set. Thirdly, the programme will ask another user (Player2) to enter the set and take number. Fourthly, the programme will show the most updated status.

```
Set  1 have  0
Set  2 have  0
Set  3 have  5      eeeee
KONG, Please enter the set number: 3
KONG, Please enter the take number: 5
KONG take 5 from set 3
Set  1 have  0
Set  2 have  0
Set  3 have  0
KONG, you win the game!
```

The game ends when all set become 0. The person who can take the last number all of the sets is the winner. The programme will show the most updated status first. Then, show the name of the player and tell that he or she win the game.

5. To Save

```
!!Set number = 0 to save the game!!
LEO, Please enter the set number: 0
LEO, You have 5 games saved already!
Delete the previous game saving?
1>Yes  !!The first saving will be deleted!!
2>No   !!You will LOSE you now playing game progress!!
LEO, Your choice?

Set  1 have  3      000
Set  2 have  4      0000
Set  3 have  5      00000

!!Set number = 0 to save the game!!
LEO, Please enter the set number: 0
LEO & KONG, You have 5 games saved already!
Delete the previous game saving?
1>Yes  !!The first saving will be deleted!!
2>No   !!You will LOSE you now playing game progress!!
LEO & KONG, Your choice?
```

User can type 0 in the set number to save the game. The game saving will be created in the 'C:/' and named 'SAVE1.DAT' for the Human vs. Computer, 'SAVE2.DAT' for the Human vs. Human.

For the Human vs. Human, **ONLY** Player1 can save the game.

Both Human vs. Computer and Human vs. Human, the maximum number of game saving is 5. If the programme detect the user is having 5 game savings, it will ask to save or not. If user says yes, the programme will delete the first game saving (the oldest one). If user says no, the current game progress will loss.

6. To Load

```
1> Human vs Computer.
2> Human vs Human.
3> How To Play.
4> Credit.
0> Exit.
Please tell me what is your choice. 1

1> Standard game
2> Ascending game
3> Random game
4> Load from save
0> Return to main menu
Which game mode do you want? 4

1> Human vs Computer.
2> Human vs Human.
3> How To Play.
4> Credit.
0> Exit.
Please tell me what is your choice. 2

1> Standard game
2> Ascending game
3> Random game
4> Load from save
0> Return to main menu
Which game mode do you want? 4
```

Both the Human vs. Computer and Human vs. Human can save and load.

```
Are you LE01?
Playing 20 set with Esay level?
1>Yes
2>No
0>Back to main menu
Your Choice? _
```

For the Human vs. Computer, the programme will show about the information of the saving. That includes the name of the player, the number of sets and the level. Users can choose yes to play with this saving again. Or choose no to see another saving information.

```
Are you leo and kong?
Playing 3 set?
1>Yes
2>No
0>Back to main menu
Your Choice? _
```

For the Human vs. Human, the programme will also show about the information of saving. That includes the name of Player1 and Player2 and the number of sets. Users can choose yes to play with this saving again. Or choose no to see another saving information.

```
Are you LEO ans KONG?  
Playing 3 set?  
1>Yes  
2>No  
0>Back to main menu  
Your Choice? 1  
  
Set 1 have 3      PPP  
Set 2 have 4      PPPP  
Set 3 have 5      PPPPP  
  
!!Set number = 0 to save the game!!  
LEO, Please enter the set number: 0  
LEO & KONG, Your game saving is updated!
```

If users choose yes, the saved game will be continued normally. However, there is only one part is different. If user chooses to save the game again, the programme will not create one more saving. The saving will only be updated.

7. To Quit

```
1> Human vs Computer.  
2> Human vs Human.  
3> How To Play.  
4> Credit.  
0> Exit.  
Please tell me what is your choice. 0_
```

When finish every game playing, saving, etc. The programme will not shut down automatically and it will just return to the main menu. To quit the game, user need to type 0 in the main menu to shut down the programme.