Limaribu

A game of dice for MSXdev08

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1 introduction

Limaribu is a game with six dice, that can be played against the computer or a human opponent. The players can score points by rolling ones, fives, triples and some special combinations. The first player to reach 5000 points is the winner.

The rules of Limaribu are the same as those described by Jan van der Meer in [2]. The strategy for the computer as opponent has been previously published in [1].

The game can be downloaded in binary form from the MSXdev08 website and may be used without charge. The source code will probably be released as well.

2 starting the program

There are several ways to run Limaribu:

- Transfer the rom image to a cartridge. The image needs to appear in a single slot or sub-slot on addresses 0x4000 to 0xBFFF, no mapper is used. The program can be used in any MSX computer with at least 16 KiB ram and 16 KiB vram.

- Use an MSX emulator, for example openMSX. You can use any MSX configuration with at least 16 KiB ram and 16 KiB vram. Limaribu can work with both MSX bios and C-bios[1].

- copy the file `limaribu.rom` to a diskette, or other medium readable with msx-dos or -dos2 and rename it to `limaribu.com`. Start the program like any other dos program.

3 playing the game

Hit space when you see the title screen. Now you will see the score board with place for three players and some options underneath to change who will be playing. The game starts with "Human" against "Machine", but any combination of at most three human and computer players is possible. When you are pleased with the line-up press press space or F5 to start the game.

During the game the line just below the score board shows whose turn it is. The next lines may status information or instructions.

The number below "points" is the number of points scored so far in this turn. Below "value" is the value of whatever has been selected since the last roll or "-" if the current selection is invalid. What the valid selections are and how much they are worth is described in the next section.

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[1]Some glitches may occur when entering names under C-bios, but this does not affect the gameplay

To select a die press the digit just above the die. The die will then be shown above the digit to indicate it is selected. To deselect a die press the digit again and the die will move back down. Users of french azerty keyboards need not press shift to select or deselect dice.

Instead of typing numbers to select and deselect dice you can also use `F2` and `F3` to cycle through your options. If you have only one possibility to make a valid selection, these keys will only have an effect if the selection has not been made yet.

If you have made a valid selection the word "ROLL" appears on the bottom of the screen. If you are happy with the selection, press `F4`, to add the value of the selection to the points scored in this turn and roll the remaining dice. The selected dice will shift to the left and a line will appear under them. The result of your next roll of the dice will appear to the right. If all six dice are on the bar, you'll see a notification that a bar is complete and the next roll will again have six dice.

If you also see "ADD" on the screen, you may press `F5` to finish your turn and add the points scored in this turn including the value of the selection to your score on the score board. Please note that you will lose the points scored in this turn if you roll dice without getting anything valid to select.

It is also possible to play with a joystick or the cursor keys. Moving left and right cycles through the options. Move up to add your points to the score, or down to roll again.

When a player reaches 5000 points or more on the score board, he or she is announced as winner and after a key press you return to the main menu.

4 rules of the game

Each turn starts with a roll of 6 dice. After each roll of the dice the player must put one or more dice on the bar. The valid combinations and the corresponding points are in table 1. The order of the dice does not matter.

| combination	points
⚄	50
⚀	100
⚁ ⚁ ⚁	200
⚂ ⚂ ⚂	300
⚃ ⚃ ⚃	400
⚄ ⚄ ⚄	500
⚅ ⚅ ⚅	600
⚀ ⚀ ⚀	1000
⚀ ⚁ ⚂ ⚃ ⚄ ⚅	1000
⚀ ⚁ ⚂ ⚃ ⚄ ⚅	1000
⋮	⋮
⚁ ⚁ ⚂ ⚂ ⚅ ⚅	1000
⚂ ⚂ ⚃ ⚃ ⚅ ⚅	1000
⚀ ⚀ ⚂ ⚂ ⚅ ⚅	1500
⚀ ⚀ ⚀ ⚀ ⚀ ⚀	5000
⚁ ⚁ ⚁ ⚁ ⚁ ⚁	5000
⚂ ⚂ ⚂ ⚂ ⚂ ⚂	5000
⚃ ⚃ ⚃ ⚃ ⚃ ⚃	5000
⚄ ⚄ ⚄ ⚄ ⚄ ⚄	5000
⚅ ⚅ ⚅ ⚅ ⚅ ⚅	5000

Table 1: scoring

With the exception of the combinations with six equal faces, the combinations must be made in one roll; if a player has ⚀ ⚀ ⚂ ⚂ , he or she can not add ⚃ ⚃ to form three pairs.

On the other hand it is allowed to use several combinations from the table after a single roll of the dice, for instance ⚀ ⚀ ⚄ is worth 250 points.

If the player has put at least one dice on the bar, he or she can do a new roll with the remaining dice. If all the dice are on the bar, we say the bar is complete and the player can start over with six dice.

If the player can not place any of the dice on the bar, the turn goes to the next player and

and points scored in this turn are cancelled. You can also end a turn by adding the points scored in a turn to the permanent score, provided you add at least 500 points and you did not just complete your first or second bar of the turn. The latter condition does not apply if adding your score of the turn to your permanent score yields 5000 points or more.

In additions to the combinations given in table 1, a player can choose, or be forced to put four of five dice with ⚀, ⚂, ⚃ or ⚅ on the bar, provided all the dice on the bar show an equal face. This can be done either at once, or starting from three of a kind. If a player does so, he or she may only put more of the same on the bar, and may not add the score of the turn until the bar is complete. The player will thus end up either scoring no points at all in that turn, or achieving instant victory by getting six equal faces.

If you have five dice with the same face on the bar, you may announce a 'lucky guess' before you roll the last die. If the last die turns out as guessed, it counts as if it matches whatever is on the bar.

References

[1] Arnold Metselaar. Toelichting bij de inzending. *MSX Computer & Club Magazine, disk abonnement*, 86a:`5000toel.txt`, November 1996. in Dutch and C.

[2] Jan van der Meer. Noorder baken. *MSX Computer & Club Magazine*, 83:6–8, May 1996. in Dutch.