## Program Creation on RPN-67 SD

## A short tutorial

In this step-by-step example, we'll create a program card of a program that calculates the cube root of the sum of the stack registers X and Y .

We'll start with a clean machine: remove any card in the card slot by swiping it right.
Enter W/PRGM mode, then clear the program memory:

1. Tap f CLx
2. Tap the following keys:
f SST A
$3 \mathrm{~h} 1 / \mathrm{x}$
h RTN

3. (Optional)

Tap the display, check your entries, then tap Cancel.
4. Double-tap the display to open the Card Manager.
5. Tap " + " to create a new card Tap "Program"
6. A card named Untitled Program appears in the category "Unclassified".

## Tap Untitled Program:



## Done

Cards
Q +

## Q Find in title

(Unclassified)

## Untitled Program

(Unclassified)

## Astronomy

## Solar Position 2

Astronomy
Finance

Manhattan Value
Finance
Math
Collatz Conjecture
Math
Fibonacci
Math
Gamma Function
Math
Linear Equations in 9 Unknowns
Math
Rational Arithmetic in Floating-Point Math
?

## 7. Create a title:

Tap the the title, change the text into Cube Root of $\mathbf{x + y}$.
8. Define a category:

Tap "(Unclassified")
Tap "My Programs"
Tap "Select"
9. (Optional) Add a description in the light-gray area.
10. Click in the rectangle above the letter $\mathbf{A}$.

Enter Calculate, followed by tab or return.
11. Tap Save (in red) at the top (scroll down if necessary).
12. Tap Load to load the changed card into the calculator.


13. Back in the calculator view, switch to RUN mode.
14. Enter:

100 ENTER 25
Tap A to see the result: 0.33
15. This is obviously wrong. It should be 5.00 .
16. Swipe the card left to see the program.
17. There's a $\mathbf{y}^{\mathbf{x}}$ instruction missing after step 004.

18. Swipe right to return to the calculator.

There are two ways to fix the program and store it on the card:
19a. In W/PRGM mode, add the missing instruction, double-tap the display, tap the program card, then "Save" and "Load".

OR (as shown below):

19b. In RUN mode, double-tap the display, then tap the program card to see the incorrect program.

Tap at the end of step 004, and hit the return key.
Type $\mathbf{y}^{\boldsymbol{\wedge}} \mathbf{x}$, then tap in an unused area.
Tap the red Save button at the top.
Tap Load.


## 20. Enter:

100 ENTER 25
Tap A to see the result: 5.00, as expected


Now remove the card from the calculator and clear the program memory:

21. Swipe the card right. Tap "Yes, clear memory"

Program memory is cleared, the card disappears. The program doesn't work anymore.
22. Double-tap the display.
23. Locate the program card Cubic Root of $\mathbf{x}+\mathbf{y}$ in the list.
24. Double-tap it to load the program.
25. Enter values $x$ and $y$, then tap A to verify the program is loaded and working.

