

Program for Exercise 3.1

The program depends on the technology you use. Here is one that works on the TI-84 Plus graphing calculator.

Select **PRGM** to get the program menu. Then select **NEW** to create a new program. You must first give a program name. Comments, which should **not** be entered into the calculator, are set off by the symbol %.

```
NAME = LAB2
: 0 STO→ C           % 'STO→' is right above the 'ON' button. %
: 0 STO→ I
: For(I,1,100,1)      % 'For(' is accessed via PRGM, CTL when you are
writing or editing a program. %
:Rand STO→ X         % 'Rand' is accessed under MATH, PRB%
:Rand STO→ Y
:If(X^2 + Y^2) < 1    % 'If' is accessed under PRGM, CTL when you are
writing or editing a program. %
C+1 STO→ C
: End                % 'End' is accessed via PRGM, CTL when you are
writing or editing a program. %
: Disp 4*C/100       % 'Disp' is accessed via PRGM, I/O when you are
writing or editing a program. %
```

To run the program hit **PRGM**, select **LAB2**, and hit **ENTER**. After a few moments an estimated of pi will appear based on 100 Monte Carlo trials.

If you want to make changes to your program, select **PRGM**, move to **EDIT**, and then select the number of the program you want to edit.