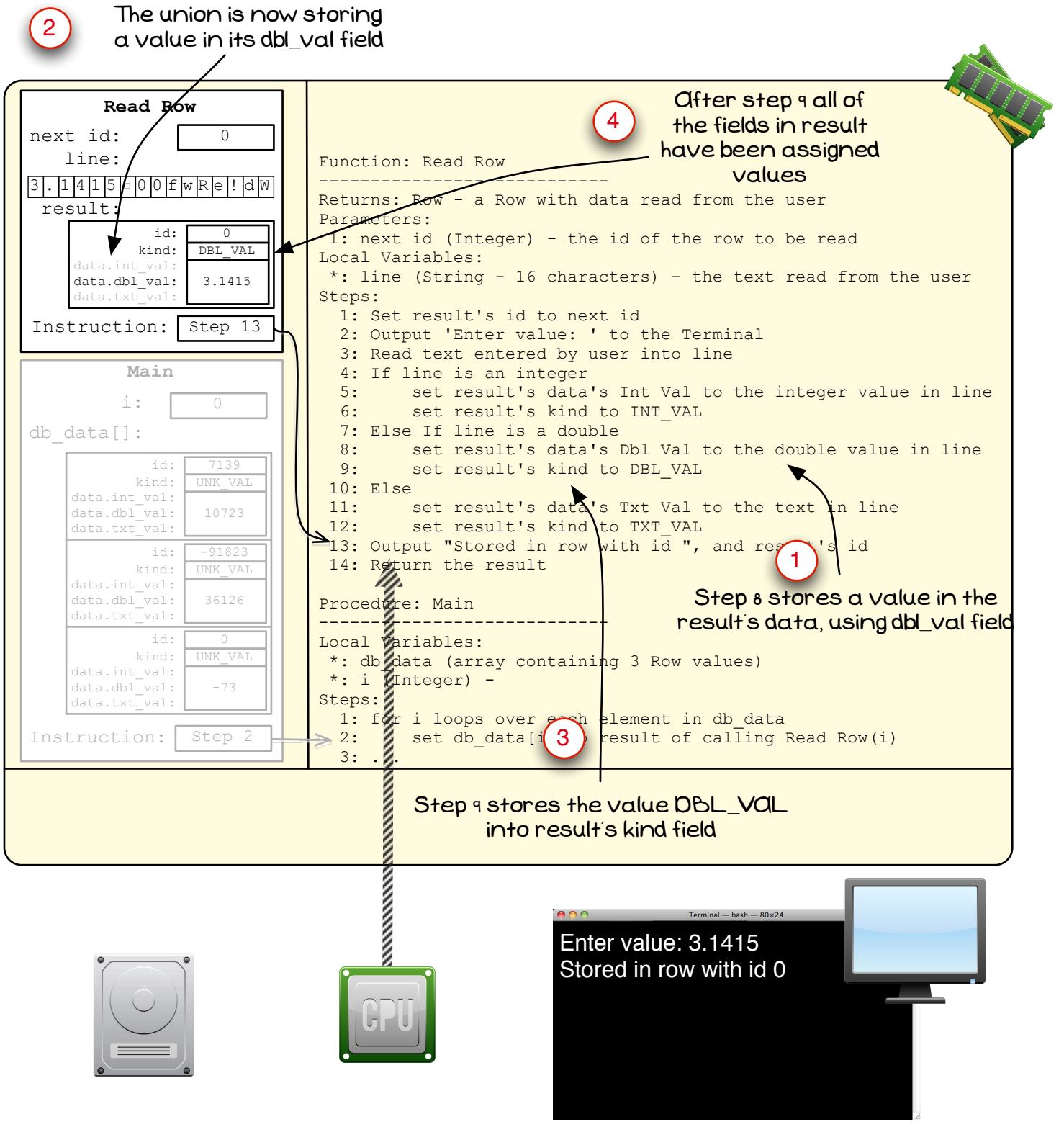
2
The union is now storing a value in its dbl_val field
Read Row
next id: 0
line: 3.1415 0 0 f w R e ! d W
result:
id: 0
kind: DBL_VAL
data.int_val:
data.dbl_val: 3.1415
data.txt_val:
Instruction: Step 13
Main
i: 0
db_data[]:
id: 7139
kind: UNK_VAL
data.int_val:
data.dbl_val: 10723
data.txt_val:
id: -91823
kind: UNK_VAL
data.int_val:
data.dbl_val: 36126
data.txt_val:
id: 0
kind: UNK_VAL
data.int_val:
data.dbl_val: -73
data.txt_val:
Instruction: Step 2
4
After step 9 all of the fields in result have been assigned values
Function: Read Row
Returns: Row - a Row with data read from the user
Parameters:
1: next id (Integer) - the id of the row to be read
Local Variables:
*: line (String - 16 characters) - the text read from the user
Steps:
1: Set result's id to next id
2: Output 'Enter value: ' to the Terminal
3: Read text entered by user into line
4: If line is an integer
5: set result's data's Int Val to the integer value in line
6: set result's kind to INT_VAL
7: Else If line is a double
8: set result's data's Dbl Val to the double value in line
9: set result's kind to DBL_VAL
10: Else
11: set result's data's Txt Val to the text in line
12: set result's kind to TXT_VAL
13: Output "Stored in row with id ", and result's id
14: Return the result
Procedure: Main
Local Variables:
*: db_data (array containing 3 Row values)
*: i (Integer) -
Steps:
1: for i loops over each element in db_data
2: set db_data[i] to result of calling Read Row(i)
3: ...
1
Step 8 stores a value in the result's data, using dbl_val field
3
Step 9 stores the value DBL_VAL into result's kind field
CPU
Terminal — bash — 80×24
Enter value: 3.1415
Stored in row with id 0