

11de8e -> b2a1ab

Rename Method Ctrl+R
Replace Magic Number with Symbolic Constant
Dead Code

b2a1ab -> ffa4c9

Extract Class
Move Method Ctrl+M (Right -> Refactor -> Move)
Extract Method Alt + Shift + M (Right -> Introduce -> Method)
Introduce Parameter Object
Replace Error Code with Exception

create ParsedArgs (Extract Class)
create InvalidInputException - for now empty (Replace Error Code with Exception)
move methods to ParsedArgs (Move Method)
first extract method to move it - isValidNumberOfArgs (Extract Method)
same with pixel size
pass whole arr to ParsedArgs at once
ParsedArgs can be used as parameter itself - getters (Introduce Parameter Object)
or extract needed fields in method calls
throw exception on first error - no true/false, throw immediately (Introduce Parameter Object)
aggregate errors (just show idea, git checkout to actual)

ffa4c9 -> 85d9e8

Extract Interface

compose methods in main
colorize, prepareOutput, outputAscii, outputPng
ass size() to FractalGrid to be used in colorize()
AsciiImageConv extract interface colorFor() - only signature, regex from ctor
Extract Class to hold current implementation

85d9e8 -> 8c6c69

Replace Data Value with Object
Primitive Obsession

define the required interface - get x,y set x,y, wid, hei
Matrix, ArrayBackedMatrix
use current code for implementation - arrayBacked
replace all occurrences by Matrix -ImgConv, Ascii, Png, FractalGrid, RegexFract
extract method symbolCount(rows, cols, pix) in Ascii

8c6c69 -> cf9506

Refused Bequest
Add Parameter
Extract Superclass
Pull Up Method
Form Template Method

need to know if dealing with Ascii or Png
Png should not extend Ascii - validPixelSize was already checked, no need to do again
ImageConverter is not abstract enough - we need to hack with side effects (Refused Bequest)
refactor to also take the output file (Add Parameter)
could be even more abstract (-> OutputStream)
extract AbstractImageConverter (Extract Superclass)
extract methods in subclasses, then pull up (Pull Up Method)
convertStart, rowStart, writePixel, rowEnd, saveResult
StringBuilder gridBuff and rowBuff to fields

cf9506 -> ac67d1

- Switch Statements
- Replace Type Code with Class
- Replace Type Code with State/Strategy

create new Quadrant class

- for now no behavior, only defined set of well named constants (Replace Type Code with Class)
- move addend methods to Quadrant (Replace Type Code with State/Strategy)

ac67d1 -> 242e26

- Temporary Field
- Replace Type Code with Subclasses
- Replace Constructor with Factory Method
- Push Down Method

pass parent as parameter instead of individual fields

- size has to be made into field
- extract method createChildren()
- children field not always used, calculate on demand
- create two subclasses based on isLeaf (Replace Type Code with Subclasses)
 - FragmentLeaf, FragmentSplittable
- move constructors to respective subclasses, keep isField
- push down writeChildrenTo(), child creation (not used by leaf), remove isField
- split Splittable into Intermediate and Root