Item 17
git_comments:

1. Predict position of first significant digit in the quotient. Note: it is possible to improve prediction accuracy by comparing first significant digits in operands but it requires additional computations so this step is omitted

git_commits:

1. **summary:** Avoid result truncate in decimal operations
   message: Avoid result truncate in decimal operations add (+), subtract (-) and multiply (*) operations: * before: * precision of result used to be always 34 (see MathContext.DECIMAL128) * after: * precision (number of significant digits) of result is at most 10000. If result exceeds given precision it will be rounded using HALF_UP mode division (/) operation: * before: * precision used to be always 34 (see MathContext.DECIMAL128) * after: * expected scale is set to minimum precision (32) minus estimated position of first digit in quotient * scale should be at least as big as maximum scale of operands * scale should not be less than 32 * scale should not be bigger than 1000 * if actual quotient scale is bigger than calculated scale then result is rounded using HALF_UP mode * trailing zeros are stripped modulo (%) operation: * before: * ArithmeticException used to occur when implicit division produces number with precision bigger than 34 (see MathContext.DECIMAL128) * after: * No exception patch by Liudmila Kornilova; reviewed by Benedict Elliott Smith for CASSANDRA-15232

github_issues:

github_issues_comments:

github_pulls:

github_pulls_comments:

github_pulls_reviews:

jira_issues:

jira_issues_comments: