|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Reason | Specific Input | | Expected Output | Actual Output |
| RLE | Delimiter |
| A coded string with several instances of the delimiter | “^5.^4.\*...\*\*..\*\*\*  .^4\*^5\*” | | “.........\*...\*\*..\*\*\*.\*\*\*  \*\*\*\*\*\*” |  |
| A string of characters with only one delimiter | “abc^5drt” | | “abcdddddrt” |  |
| A string of numbers with two instances of the delimiter | “1293^54123” | | “12934444123” |  |
| A string without delimiter | “abcddcba” | | “abcddcba” |  |
| A string with two delimiter. One in the front, one after | “^5tskhhsdyw^5t” | | “ttttskhhsdywttttt” |  |

decodedRLECode

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Reason | Specific Input | | Expected output | Actual Output |
| decodeRLECode | width |
| A string whose length is an exact multiple of the width (are there blank rows above/below the picture?) | “.........\*...\*\*..\*\*\*.\*\*\*\*\*\*\*\*\*” | 5 | .....  ....\*  ...\*\*  ..\*\*\*  .\*\*\*\*  \*\*\*\*\* |  |
| A string whose length is exactly double the original width | “.........\*...\*\*..\*\*\*.\*\*\*\*\*\*\*\*\*” | 10 | .........\*  ...\*\*..\*\*\*  .\*\*\*\*\*\*\*\*\* |  |
| A string whose length is not an exact multiple of the width | “.........\*...\*\*..\*\*\*.\*\*\*\*\*\*\*\*\*” | 4 | ....  ....  .\*..  .\*\*.  .\*\*\*  .\*\*\*  \*\*\*\*  \*\* |  |
| A String whose length is exactly the same the width | “.........\*...\*\*..\*\*\*.\*\*\*\*\*\*\*\*\*” | 30 | .........\*...\*\*..\*\*\*.\*\*\*\*\*\*\*\*\* |  |
| The width is 7. There will be only 2 stars in the last line | “.........\*...\*\*..\*\*\*.\*\*\*\*\*\*\*\*\*” | 7 |  |  |
| The width is 8. There will be only 6 stars in the last line | “.........\*...\*\*..\*\*\*.\*\*\*\*\*\*\*\*\*” | 8 |  |  |
| The width is 9. There will be only 3 stars in the last line | “.........\*...\*\*..\*\*\*.\*\*\*\*\*\*\*\*\*” | 9 |  |  |
| The width < 0 | “.........\*...\*\*..\*\*\*.\*\*\*\*\*\*\*\*\*” | -5 |  |  |
| The width > decodeRLECode.length() | “.........\*...\*\*..\*\*\*.\*\*\*\*\*\*\*\*\*” | 35 |  |  |