

# Package ‘gradeR’

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**Title** Helps Grade Assignment Submissions in Common R Formats

**Version** 2.0.1

**Description** After being given the location of your students' submissions and a test file, the function runs each file that is an R script, R Markdown file, or Quarto document, and evaluates the results from all the given tests. Results are neatly returned in a data frame that has a row for each student, and a column for each test.

**Depends** R (>= 3.4)

**License** MIT + file LICENSE

**Encoding** UTF-8

**RoxygenNote** 7.3.3

**Imports** testthat, methods, callr, jsonlite

**Suggests** knitr, rmarkdown

**VignetteBuilder** knitr

**NeedsCompilation** no

**Author** Taylor Brown [aut, cre] (ORCID: <https://orcid.org/0000-0003-4972-6251>), GitHub: tbrown122387),  
Pete Benbow [ctb] (ORCID: <https://orcid.org/0009-0006-0505-7411>),  
GitHub: pebenbow)

**Maintainer** Taylor Brown <trb5me@virginia.edu>

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calcGrades	<i>The grading function.</i>
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## Description

This function grades a bunch of R script assignments

## Usage

```
calcGrades(  
  submission_dir,  
  your_test_file,  
  suppress_warnings = TRUE,  
  verbose = FALSE  
)
```

## Arguments

`submission_dir` where the assignments are located

`your_test_file` the path to your testthat test file (e.g. `grade_hw1.R`)

`suppress_warnings`  
warning handlers prevent code from being run after they catch something. Suppress this behavior by setting this argument to `TRUE`.

`verbose` set to true if you want to print the name of the file as it's being ran

## Value

a data.frame of all the scores for each student

## Examples

```
# change paths to *your* paths  
submissions <- "extdata/example/assignment1_submissions/"  
my_test_file <- system.file("extdata/example", "grade_hw1.R", package = "gradeR")  
results <- calcGrades(submissions, my_test_file)
```

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`calcGradesForGradescope`*The grading function for Gradescope.*

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## Description

This function grades one R script assignment submission and writes results out to a properly-formatted json file for Gradescope. Supports R scripts (.r, .R) as well as R Markdown (.Rmd) and Quarto (.qmd) documents.

## Usage

```
calcGradesForGradescope(  
  submission_file,  
  test_file,  
  which_results = "gradescope",  
  suppress_warnings = TRUE  
)
```

## Arguments

<code>submission_file</code>	the path to the assignment submission file (e.g. "hw1.r", "hw1.Rmd", or "hw1.qmd"). For Rmd/Qmd files, R code will be automatically extracted.
<code>test_file</code>	the path to the .r file with test_that tests (e.g. "hw1_tests.R")
<code>which_results</code>	Choose either "testing" or "gradescope". If equal to "gradescope", the json file is written to /autograder/results/results.json. Otherwise, results.json is written to your current working directory.
<code>suppress_warnings</code>	If FALSE, warnings are fatal; if set to TRUE, warnings will not prematurely terminate running of student submission scripts.

## Value

Invisibly returns NULL. The function's primary purpose is the side effect of writing a JSON results file.

## Examples

```
## Not run:  
# For local testing  
calcGradesForGradescope("student_hw1.r", "hw1_tests.R", which_results = "testing")  
  
# For Gradescope autograder (inside Gradescope environment)  
# calcGradesForGradescope("hw1.r", "hw1_tests.R", which_results = "gradescope")  
  
# Works with R Markdown files too
```

```
# calcGradesForGradescope("student_hw1.Rmd", "hw1_tests.R", which_results = "testing")  
## End(Not run)
```

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findBadEncodingFiles    *This function finds unreadable files.*

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### Description

A function that finds student submissions with poorly encoded characters

### Usage

```
findBadEncodingFiles(submission_dir)
```

### Arguments

submission\_dir    where the assignments are located

### Examples

```
# change paths to *your* paths  
submissions <- "extdata/assignment1_submissions/"  
findBadEncodingFiles(submissions) # perhaps ask these students to resubmit
```

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findGlobalPaths        *This function finds files with global file paths.*

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### Description

A function that finds student submissions that refer to machine-specific file paths

### Usage

```
findGlobalPaths(submission_dir)
```

### Arguments

submission\_dir    where the assignments are located

### Examples

```
# change paths to *your* paths  
submissions <- "extdata/assignment1_submissions/"  
findGlobalPaths(submissions) # perhaps ask these students to resubmit
```

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<code>getTestScriptReport</code>	<i>The function for analyzing and summarizing R test scripts.</i>
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**Description**

This function scans a given test script and summarizes the number of tests and test criteria in the script, as well as point values.

**Usage**

```
getTestScriptReport(script_path)
```

**Arguments**

<code>script_path</code>	the name of the .r file containing tests tests (e.g. "hw1_tests.R")
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