title: “Strings Exercises” author: “Kim Roth & Johnathan Clementi” date: “04/28/20” output: word\_document — These are exercises based on R for Data Science by Wickham and Grolemund.

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While not required I reccomend the regex crossword for practice <https://regexcrossword.com>

library(tidyverse)

1. In code that doesn’t use stringr, you’ll often see paste() and paste0(). What’s the difference between the two functions? What stringr function are they equivalent to? How do the functions differ in their handling of NA?

1A. paste() is different from paste0() in that they concatenate strings, but paste() allows for a seperator arguments to be included. They are equivilent to the str\_c() function of stringr. Both paste() and paste0() deal with NA as a string, but str\_c deals with NA as a missing value.

1. Use str\_sub() to extract the second to last character from a string.

x <- c("Apple", "Banana", "Pear")  
  
str\_sub(x, -2, -2)

## [1] "l" "n" "a"

1. What is the difference between n, \n, \\n, \\\n? n matches the character “n” \n matches a new line if put into a regex function \\n can be passed as a string to a regex function and will match a new line - \\ will match a  in a string \\\n if the first  is an escape character for the second , then the regex will match a  before a new line.

For 4-13 Given the corpus of common words in stringr::words, create regular expressions that find all words that:

head(words,5)

## [1] "a" "able" "about" "absolute" "accept"

1. Start with “q”.

str\_subset(words, "^q")

## [1] "quality" "quarter" "question" "quick" "quid" "quiet" "quite"

1. End with “y”

str\_subset(words, "y$")

## [1] "already" "any" "apply" "authority" "away"   
## [6] "baby" "beauty" "body" "boy" "busy"   
## [11] "buy" "by" "carry" "city" "community"   
## [16] "company" "copy" "country" "county" "day"   
## [21] "dry" "early" "easy" "economy" "employ"   
## [26] "enjoy" "every" "family" "fly" "friday"   
## [31] "germany" "guy" "happy" "heavy" "history"   
## [36] "holiday" "identify" "industry" "key" "lady"   
## [41] "lay" "likely" "many" "marry" "may"   
## [46] "monday" "money" "necessary" "okay" "only"   
## [51] "opportunity" "party" "pay" "play" "policy"   
## [56] "pretty" "quality" "ready" "really" "saturday"   
## [61] "say" "secretary" "society" "sorry" "stay"   
## [66] "story" "strategy" "study" "sunday" "supply"   
## [71] "they" "thirty" "thursday" "today" "try"   
## [76] "tuesday" "twenty" "university" "very" "way"   
## [81] "wednesday" "why" "worry" "yesterday"

1. Have five letters or more.

str\_subset(words, "[:alpha:]{5,}")

## [1] "about" "absolute" "accept" "account" "achieve"   
## [6] "across" "active" "actual" "address" "admit"   
## [11] "advertise" "affect" "afford" "after" "afternoon"   
## [16] "again" "against" "agent" "agree" "allow"   
## [21] "almost" "along" "already" "alright" "although"   
## [26] "always" "america" "amount" "another" "answer"   
## [31] "apart" "apparent" "appear" "apply" "appoint"   
## [36] "approach" "appropriate" "argue" "around" "arrange"   
## [41] "associate" "assume" "attend" "authority" "available"   
## [46] "aware" "awful" "balance" "basis" "beauty"   
## [51] "because" "become" "before" "begin" "behind"   
## [56] "believe" "benefit" "between" "birth" "black"   
## [61] "bloke" "blood" "board" "bother" "bottle"   
## [66] "bottom" "break" "brief" "brilliant" "bring"   
## [71] "britain" "brother" "budget" "build" "business"   
## [76] "carry" "catch" "cause" "centre" "certain"   
## [81] "chair" "chairman" "chance" "change" "character"   
## [86] "charge" "cheap" "check" "child" "choice"   
## [91] "choose" "Christ" "Christmas" "church" "claim"   
## [96] "class" "clean" "clear" "client" "clock"   
## [101] "close" "closes" "clothe" "coffee" "colleague"   
## [106] "collect" "college" "colour" "comment" "commit"   
## [111] "committee" "common" "community" "company" "compare"   
## [116] "complete" "compute" "concern" "condition" "confer"   
## [121] "consider" "consult" "contact" "continue" "contract"   
## [126] "control" "converse" "corner" "correct" "could"   
## [131] "council" "count" "country" "county" "couple"   
## [136] "course" "court" "cover" "create" "cross"   
## [141] "current" "danger" "debate" "decide" "decision"   
## [146] "definite" "degree" "department" "depend" "describe"   
## [151] "design" "detail" "develop" "difference" "difficult"   
## [156] "dinner" "direct" "discuss" "district" "divide"   
## [161] "doctor" "document" "double" "doubt" "dress"   
## [166] "drink" "drive" "during" "early" "economy"   
## [171] "educate" "effect" "eight" "either" "elect"   
## [176] "electric" "eleven" "employ" "encourage" "engine"   
## [181] "english" "enjoy" "enough" "enter" "environment"  
## [186] "equal" "especial" "europe" "evening" "every"   
## [191] "evidence" "exact" "example" "except" "excuse"   
## [196] "exercise" "exist" "expect" "expense" "experience"   
## [201] "explain" "express" "extra" "family" "father"   
## [206] "favour" "field" "fight" "figure" "final"   
## [211] "finance" "finish" "first" "floor" "follow"   
## [216] "force" "forget" "fortune" "forward" "france"   
## [221] "friday" "friend" "front" "function" "further"   
## [226] "future" "garden" "general" "germany" "glass"   
## [231] "goodbye" "govern" "grand" "grant" "great"   
## [236] "green" "ground" "group" "guess" "happen"   
## [241] "happy" "health" "heart" "heavy" "history"   
## [246] "holiday" "honest" "horse" "hospital" "house"   
## [251] "however" "hullo" "hundred" "husband" "identify"   
## [256] "imagine" "important" "improve" "include" "income"   
## [261] "increase" "indeed" "individual" "industry" "inform"   
## [266] "inside" "instead" "insure" "interest" "introduce"   
## [271] "invest" "involve" "issue" "jesus" "judge"   
## [276] "kitchen" "knock" "labour" "language" "large"   
## [281] "laugh" "learn" "leave" "letter" "level"   
## [286] "light" "likely" "limit" "listen" "little"   
## [291] "local" "london" "lunch" "machine" "major"   
## [296] "manage" "market" "marry" "match" "matter"   
## [301] "maybe" "meaning" "measure" "member" "mention"   
## [306] "middle" "might" "million" "minister" "minus"   
## [311] "minute" "mister" "moment" "monday" "money"   
## [316] "month" "morning" "mother" "motion" "music"   
## [321] "nation" "nature" "necessary" "never" "night"   
## [326] "normal" "north" "notice" "number" "obvious"   
## [331] "occasion" "offer" "office" "often" "operate"   
## [336] "opportunity" "oppose" "order" "organize" "original"   
## [341] "other" "otherwise" "ought" "paint" "paper"   
## [346] "paragraph" "pardon" "parent" "particular" "party"   
## [351] "pence" "pension" "people" "percent" "perfect"   
## [356] "perhaps" "period" "person" "photograph" "picture"   
## [361] "piece" "place" "please" "point" "police"   
## [366] "policy" "politic" "position" "positive" "possible"   
## [371] "pound" "power" "practise" "prepare" "present"   
## [376] "press" "pressure" "presume" "pretty" "previous"   
## [381] "price" "print" "private" "probable" "problem"   
## [386] "proceed" "process" "produce" "product" "programme"   
## [391] "project" "proper" "propose" "protect" "provide"   
## [396] "public" "purpose" "quality" "quarter" "question"   
## [401] "quick" "quiet" "quite" "radio" "raise"   
## [406] "range" "rather" "ready" "realise" "really"   
## [411] "reason" "receive" "recent" "reckon" "recognize"   
## [416] "recommend" "record" "reduce" "refer" "regard"   
## [421] "region" "relation" "remember" "report" "represent"   
## [426] "require" "research" "resource" "respect" "responsible"  
## [431] "result" "return" "right" "round" "saturday"   
## [436] "scheme" "school" "science" "score" "scotland"   
## [441] "second" "secretary" "section" "secure" "sense"   
## [446] "separate" "serious" "serve" "service" "settle"   
## [451] "seven" "shall" "share" "sheet" "shoot"   
## [456] "short" "should" "similar" "simple" "since"   
## [461] "single" "sister" "situate" "sleep" "slight"   
## [466] "small" "smoke" "social" "society" "sorry"   
## [471] "sound" "south" "space" "speak" "special"   
## [476] "specific" "speed" "spell" "spend" "square"   
## [481] "staff" "stage" "stairs" "stand" "standard"   
## [486] "start" "state" "station" "stick" "still"   
## [491] "story" "straight" "strategy" "street" "strike"   
## [496] "strong" "structure" "student" "study" "stuff"   
## [501] "stupid" "subject" "succeed" "sudden" "suggest"   
## [506] "summer" "sunday" "supply" "support" "suppose"   
## [511] "surprise" "switch" "system" "table" "teach"   
## [516] "telephone" "television" "terrible" "thank" "there"   
## [521] "therefore" "thing" "think" "thirteen" "thirty"   
## [526] "though" "thousand" "three" "through" "throw"   
## [531] "thursday" "today" "together" "tomorrow" "tonight"   
## [536] "total" "touch" "toward" "trade" "traffic"   
## [541] "train" "transport" "travel" "treat" "trouble"   
## [546] "trust" "tuesday" "twelve" "twenty" "under"   
## [551] "understand" "union" "unite" "university" "unless"   
## [556] "until" "usual" "value" "various" "video"   
## [561] "village" "visit" "waste" "watch" "water"   
## [566] "wednesday" "weigh" "welcome" "where" "whether"   
## [571] "which" "while" "white" "whole" "window"   
## [576] "within" "without" "woman" "wonder" "world"   
## [581] "worry" "worse" "worth" "would" "write"   
## [586] "wrong" "yesterday" "young"

1. Start with a consontants.(Hint: thinking about matching “not”-vowels.)

str\_subset(words, "^[b-df-hj-np-tv-z]")

## [1] "baby" "back" "bad" "bag" "balance"   
## [6] "ball" "bank" "bar" "base" "basis"   
## [11] "be" "bear" "beat" "beauty" "because"   
## [16] "become" "bed" "before" "begin" "behind"   
## [21] "believe" "benefit" "best" "bet" "between"   
## [26] "big" "bill" "birth" "bit" "black"   
## [31] "bloke" "blood" "blow" "blue" "board"   
## [36] "boat" "body" "book" "both" "bother"   
## [41] "bottle" "bottom" "box" "boy" "break"   
## [46] "brief" "brilliant" "bring" "britain" "brother"   
## [51] "budget" "build" "bus" "business" "busy"   
## [56] "but" "buy" "by" "cake" "call"   
## [61] "can" "car" "card" "care" "carry"   
## [66] "case" "cat" "catch" "cause" "cent"   
## [71] "centre" "certain" "chair" "chairman" "chance"   
## [76] "change" "chap" "character" "charge" "cheap"   
## [81] "check" "child" "choice" "choose" "church"   
## [86] "city" "claim" "class" "clean" "clear"   
## [91] "client" "clock" "close" "closes" "clothe"   
## [96] "club" "coffee" "cold" "colleague" "collect"   
## [101] "college" "colour" "come" "comment" "commit"   
## [106] "committee" "common" "community" "company" "compare"   
## [111] "complete" "compute" "concern" "condition" "confer"   
## [116] "consider" "consult" "contact" "continue" "contract"   
## [121] "control" "converse" "cook" "copy" "corner"   
## [126] "correct" "cost" "could" "council" "count"   
## [131] "country" "county" "couple" "course" "court"   
## [136] "cover" "create" "cross" "cup" "current"   
## [141] "cut" "dad" "danger" "date" "day"   
## [146] "dead" "deal" "dear" "debate" "decide"   
## [151] "decision" "deep" "definite" "degree" "department"   
## [156] "depend" "describe" "design" "detail" "develop"   
## [161] "die" "difference" "difficult" "dinner" "direct"   
## [166] "discuss" "district" "divide" "do" "doctor"   
## [171] "document" "dog" "door" "double" "doubt"   
## [176] "down" "draw" "dress" "drink" "drive"   
## [181] "drop" "dry" "due" "during" "face"   
## [186] "fact" "fair" "fall" "family" "far"   
## [191] "farm" "fast" "father" "favour" "feed"   
## [196] "feel" "few" "field" "fight" "figure"   
## [201] "file" "fill" "film" "final" "finance"   
## [206] "find" "fine" "finish" "fire" "first"   
## [211] "fish" "fit" "five" "flat" "floor"   
## [216] "fly" "follow" "food" "foot" "for"   
## [221] "force" "forget" "form" "fortune" "forward"   
## [226] "four" "france" "free" "friday" "friend"   
## [231] "from" "front" "full" "fun" "function"   
## [236] "fund" "further" "future" "game" "garden"   
## [241] "gas" "general" "germany" "get" "girl"   
## [246] "give" "glass" "go" "god" "good"   
## [251] "goodbye" "govern" "grand" "grant" "great"   
## [256] "green" "ground" "group" "grow" "guess"   
## [261] "guy" "hair" "half" "hall" "hand"   
## [266] "hang" "happen" "happy" "hard" "hate"   
## [271] "have" "he" "head" "health" "hear"   
## [276] "heart" "heat" "heavy" "hell" "help"   
## [281] "here" "high" "history" "hit" "hold"   
## [286] "holiday" "home" "honest" "hope" "horse"   
## [291] "hospital" "hot" "hour" "house" "how"   
## [296] "however" "hullo" "hundred" "husband" "jesus"   
## [301] "job" "join" "judge" "jump" "just"   
## [306] "keep" "key" "kid" "kill" "kind"   
## [311] "king" "kitchen" "knock" "know" "labour"   
## [316] "lad" "lady" "land" "language" "large"   
## [321] "last" "late" "laugh" "law" "lay"   
## [326] "lead" "learn" "leave" "left" "leg"   
## [331] "less" "let" "letter" "level" "lie"   
## [336] "life" "light" "like" "likely" "limit"   
## [341] "line" "link" "list" "listen" "little"   
## [346] "live" "load" "local" "lock" "london"   
## [351] "long" "look" "lord" "lose" "lot"   
## [356] "love" "low" "luck" "lunch" "machine"   
## [361] "main" "major" "make" "man" "manage"   
## [366] "many" "mark" "market" "marry" "match"   
## [371] "matter" "may" "maybe" "mean" "meaning"   
## [376] "measure" "meet" "member" "mention" "middle"   
## [381] "might" "mile" "milk" "million" "mind"   
## [386] "minister" "minus" "minute" "miss" "mister"   
## [391] "moment" "monday" "money" "month" "more"   
## [396] "morning" "most" "mother" "motion" "move"   
## [401] "mrs" "much" "music" "must" "name"   
## [406] "nation" "nature" "near" "necessary" "need"   
## [411] "never" "new" "news" "next" "nice"   
## [416] "night" "nine" "no" "non" "none"   
## [421] "normal" "north" "not" "note" "notice"   
## [426] "now" "number" "pack" "page" "paint"   
## [431] "pair" "paper" "paragraph" "pardon" "parent"   
## [436] "park" "part" "particular" "party" "pass"   
## [441] "past" "pay" "pence" "pension" "people"   
## [446] "per" "percent" "perfect" "perhaps" "period"   
## [451] "person" "photograph" "pick" "picture" "piece"   
## [456] "place" "plan" "play" "please" "plus"   
## [461] "point" "police" "policy" "politic" "poor"   
## [466] "position" "positive" "possible" "post" "pound"   
## [471] "power" "practise" "prepare" "present" "press"   
## [476] "pressure" "presume" "pretty" "previous" "price"   
## [481] "print" "private" "probable" "problem" "proceed"   
## [486] "process" "produce" "product" "programme" "project"   
## [491] "proper" "propose" "protect" "provide" "public"   
## [496] "pull" "purpose" "push" "put" "quality"   
## [501] "quarter" "question" "quick" "quid" "quiet"   
## [506] "quite" "radio" "rail" "raise" "range"   
## [511] "rate" "rather" "read" "ready" "real"   
## [516] "realise" "really" "reason" "receive" "recent"   
## [521] "reckon" "recognize" "recommend" "record" "red"   
## [526] "reduce" "refer" "regard" "region" "relation"   
## [531] "remember" "report" "represent" "require" "research"   
## [536] "resource" "respect" "responsible" "rest" "result"   
## [541] "return" "rid" "right" "ring" "rise"   
## [546] "road" "role" "roll" "room" "round"   
## [551] "rule" "run" "safe" "sale" "same"   
## [556] "saturday" "save" "say" "scheme" "school"   
## [561] "science" "score" "scotland" "seat" "second"   
## [566] "secretary" "section" "secure" "see" "seem"   
## [571] "self" "sell" "send" "sense" "separate"   
## [576] "serious" "serve" "service" "set" "settle"   
## [581] "seven" "sex" "shall" "share" "she"   
## [586] "sheet" "shoe" "shoot" "shop" "short"   
## [591] "should" "show" "shut" "sick" "side"   
## [596] "sign" "similar" "simple" "since" "sing"   
## [601] "single" "sir" "sister" "sit" "site"   
## [606] "situate" "six" "size" "sleep" "slight"   
## [611] "slow" "small" "smoke" "so" "social"   
## [616] "society" "some" "son" "soon" "sorry"   
## [621] "sort" "sound" "south" "space" "speak"   
## [626] "special" "specific" "speed" "spell" "spend"   
## [631] "square" "staff" "stage" "stairs" "stand"   
## [636] "standard" "start" "state" "station" "stay"   
## [641] "step" "stick" "still" "stop" "story"   
## [646] "straight" "strategy" "street" "strike" "strong"   
## [651] "structure" "student" "study" "stuff" "stupid"   
## [656] "subject" "succeed" "such" "sudden" "suggest"   
## [661] "suit" "summer" "sun" "sunday" "supply"   
## [666] "support" "suppose" "sure" "surprise" "switch"   
## [671] "system" "table" "take" "talk" "tape"   
## [676] "tax" "tea" "teach" "team" "telephone"   
## [681] "television" "tell" "ten" "tend" "term"   
## [686] "terrible" "test" "than" "thank" "the"   
## [691] "then" "there" "therefore" "they" "thing"   
## [696] "think" "thirteen" "thirty" "this" "thou"   
## [701] "though" "thousand" "three" "through" "throw"   
## [706] "thursday" "tie" "time" "to" "today"   
## [711] "together" "tomorrow" "tonight" "too" "top"   
## [716] "total" "touch" "toward" "town" "trade"   
## [721] "traffic" "train" "transport" "travel" "treat"   
## [726] "tree" "trouble" "true" "trust" "try"   
## [731] "tuesday" "turn" "twelve" "twenty" "two"   
## [736] "type" "value" "various" "very" "video"   
## [741] "view" "village" "visit" "vote" "wage"   
## [746] "wait" "walk" "wall" "want" "war"   
## [751] "warm" "wash" "waste" "watch" "water"   
## [756] "way" "we" "wear" "wednesday" "wee"   
## [761] "week" "weigh" "welcome" "well" "west"   
## [766] "what" "when" "where" "whether" "which"   
## [771] "while" "white" "who" "whole" "why"   
## [776] "wide" "wife" "will" "win" "wind"   
## [781] "window" "wish" "with" "within" "without"   
## [786] "woman" "wonder" "wood" "word" "work"   
## [791] "world" "worry" "worse" "worth" "would"   
## [796] "write" "wrong" "year" "yes" "yesterday"   
## [801] "yet" "you" "young"

1. That only contain vowels.

str\_subset(words, "^[aeiou]+$")

## [1] "a"

1. End with ing, but not with ring.

str\_subset(words, "[^r]ing$")

## [1] "evening" "king" "meaning" "morning" "sing" "thing"

1. End with ed or ly.

str\_subset(words, "(ed|ly)$")

## [1] "apply" "bed" "early" "family" "feed" "fly" "hundred"  
## [8] "indeed" "likely" "need" "only" "proceed" "really" "red"   
## [15] "speed" "succeed" "supply"

1. Start with two vowels.

str\_subset(words, "^[aeiou]{2}")

## [1] "air" "authority" "each" "early" "east" "easy"   
## [7] "eat" "eight" "either" "europe" "ought" "out"

1. Have three or more consontant in a row.

str\_subset(words, "[b-df-hj-np-tv-z]{3,}")

## [1] "address" "against" "alright" "although" "answer"   
## [6] "apply" "approach" "appropriate" "birth" "bottle"   
## [11] "carry" "catch" "centre" "Christmas" "church"   
## [16] "complete" "contract" "control" "country" "county"   
## [21] "department" "describe" "district" "dry" "early"   
## [26] "eight" "electric" "employ" "english" "example"   
## [31] "explain" "express" "extra" "fight" "first"   
## [36] "fly" "function" "further" "goodbye" "happy"   
## [41] "health" "hundred" "improve" "include" "increase"   
## [46] "industry" "instead" "introduce" "kitchen" "light"   
## [51] "little" "lunch" "marry" "match" "middle"   
## [56] "might" "month" "mrs" "night" "north"   
## [61] "only" "ought" "party" "pretty" "really"   
## [66] "research" "right" "scheme" "school" "settle"   
## [71] "simple" "single" "slight" "sorry" "straight"   
## [76] "strategy" "street" "strike" "strong" "structure"   
## [81] "supply" "surprise" "switch" "system" "thirty"   
## [86] "three" "through" "throw" "thursday" "tonight"   
## [91] "transport" "try" "twenty" "type" "understand"   
## [96] "watch" "why" "world" "worry" "worth"

1. Have two or more consonant-vowel pairs in a row.

str\_subset(words, "([b-df-hj-np-tv-z][aeiou]){2,}")

## [1] "absolute" "active" "advertise" "america" "apparent"   
## [6] "associate" "assume" "authority" "aware" "balance"   
## [11] "base" "basis" "because" "become" "before"   
## [16] "begin" "behind" "believe" "benefit" "bloke"   
## [21] "britain" "business" "cake" "care" "case"   
## [26] "character" "close" "closes" "college" "colour"   
## [31] "come" "community" "compare" "complete" "compute"   
## [36] "condition" "consider" "continue" "cover" "date"   
## [41] "debate" "decide" "decision" "definite" "department"   
## [46] "depend" "describe" "design" "detail" "develop"   
## [51] "difference" "difficult" "direct" "divide" "document"   
## [56] "drive" "during" "economy" "educate" "eleven"   
## [61] "encourage" "engine" "environment" "especial" "europe"   
## [66] "evening" "evidence" "excuse" "exercise" "experience"   
## [71] "face" "family" "favour" "figure" "file"   
## [76] "final" "finance" "fine" "finish" "fire"   
## [81] "five" "fortune" "friday" "future" "game"   
## [86] "general" "give" "govern" "hate" "have"   
## [91] "here" "holiday" "home" "honest" "hope"   
## [96] "hospital" "however" "imagine" "improve" "include"   
## [101] "income" "individual" "inside" "insure" "interest"   
## [106] "introduce" "jesus" "labour" "late" "level"   
## [111] "life" "like" "likely" "limit" "line"   
## [116] "live" "local" "lose" "love" "machine"   
## [121] "major" "make" "manage" "measure" "mile"   
## [126] "minister" "minus" "minute" "moment" "money"   
## [131] "more" "motion" "move" "music" "name"   
## [136] "nation" "nature" "necessary" "never" "nice"   
## [141] "nine" "none" "note" "notice" "occasion"   
## [146] "office" "operate" "opportunity" "oppose" "organize"   
## [151] "original" "otherwise" "page" "paper" "paragraph"   
## [156] "parent" "particular" "period" "photograph" "picture"   
## [161] "place" "police" "policy" "politic" "position"   
## [166] "positive" "power" "practise" "prepare" "present"   
## [171] "pressure" "presume" "previous" "price" "private"   
## [176] "probable" "proceed" "process" "produce" "product"   
## [181] "project" "proper" "propose" "protect" "provide"   
## [186] "purpose" "radio" "rate" "realise" "receive"   
## [191] "recent" "recognize" "recommend" "record" "reduce"   
## [196] "refer" "regard" "region" "relation" "remember"   
## [201] "report" "represent" "require" "research" "resource"   
## [206] "result" "return" "rise" "role" "rule"   
## [211] "safe" "sale" "same" "saturday" "save"   
## [216] "scheme" "score" "second" "secretary" "secure"   
## [221] "separate" "serious" "service" "seven" "share"   
## [226] "side" "similar" "site" "situate" "size"   
## [231] "smoke" "social" "society" "some" "space"   
## [236] "special" "specific" "stage" "state" "station"   
## [241] "strategy" "strike" "structure" "student" "stupid"   
## [246] "suppose" "sure" "surprise" "take" "tape"   
## [251] "telephone" "television" "there" "therefore" "time"   
## [256] "today" "together" "tomorrow" "tonight" "total"   
## [261] "toward" "trade" "travel" "unite" "university"   
## [266] "value" "various" "video" "village" "visit"   
## [271] "vote" "wage" "water" "welcome" "where"   
## [276] "while" "white" "whole" "wide" "wife"   
## [281] "woman" "write"

1. Replace spaces in a string with \_

cars = tibble::rownames\_to\_column(mtcars,"Name")  
cars = head(cars, 35)

str\_replace(cars$Name,"\\s","\_")

## [1] "Mazda\_RX4" "Mazda\_RX4 Wag" "Datsun\_710"   
## [4] "Hornet\_4 Drive" "Hornet\_Sportabout" "Valiant"   
## [7] "Duster\_360" "Merc\_240D" "Merc\_230"   
## [10] "Merc\_280" "Merc\_280C" "Merc\_450SE"   
## [13] "Merc\_450SL" "Merc\_450SLC" "Cadillac\_Fleetwood"   
## [16] "Lincoln\_Continental" "Chrysler\_Imperial" "Fiat\_128"   
## [19] "Honda\_Civic" "Toyota\_Corolla" "Toyota\_Corona"   
## [22] "Dodge\_Challenger" "AMC\_Javelin" "Camaro\_Z28"   
## [25] "Pontiac\_Firebird" "Fiat\_X1-9" "Porsche\_914-2"   
## [28] "Lotus\_Europa" "Ford\_Pantera L" "Ferrari\_Dino"   
## [31] "Maserati\_Bora" "Volvo\_142E"