

Package ‘edm1’

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Title edm

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Description What the package does (one paragraph).

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description Set of tools to manage mostly dataframe and character.

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all_stat	<i>all_stat</i>
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Description

Allow to see all the main statistics indicators (mean, median, variance, standard deviation, sum, max, min, quantile) of variables in a dataframe by the modality of a variable in a column of the input datarame. In addition to that, you can get the occurence of other qualitative variables by your chosen qualitative variable, you have just to precise it in the vector "stat_var" where all the statistics indicators are given with "occu-var_you_want/".

Usage

```
all_stat(inpt_v, var_add = c(), stat_var = c(), inpt_df)
```

Arguments

inpt_v	is the modalities of the variables
var_add	is the variables you want to get the stats from
stat_var	is the stats indicators you want
inpt_df	is the input dataframe

Examples

```
df <- data.frame("mod"=c("first", "seco", "seco", "first", "first", "third", "first"),
  "var1"=c(11, 22, 21, 22, 22, 11, 9),
  "var2"=c("d", "d", "z", "z", "z", "d", "z"),
  "var3"=c(45, 44, 43, 46, 45, 45, 42),
  "var4"=c("A", "A", "A", "A", "B", "C", "C"))

all_stat(inpt_v=c("first", "seco"), var_add = c("var1", "var2", "var3", "var4"),
  stat_var=c("sum", "mean", "median", "sd", "occu-var2/", "occu-var4/", "variance", "quant"),
  inpt_df=df)
```

append_row	<i>append_row</i>
------------	-------------------

Description

Append the last row from dataframe to the another or same dataframe

Usage

```
append_row(df_in, df, hmn = 1, na_col = c(), unique_do_not_know = NA)
```

Arguments

df_in	is the dataframe from which the row will append to another or the same dataframe
df	is the dataframe to which the row will append
hmn	is how many time the last row will be appended
na_col	is a vector containing the columns that won't append and will be replaced by another value (unique_do_not_know)
unique_do_not_know	is the value of the non appending column in the appending row

can_be_num	<i>can_be_num</i>
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Description

Return TRUE if a variable can be converted to a number and FALSE if not (supports float)

Usage

```
can_be_num(x)
```

Arguments

x	is the input value
---	--------------------

change_date	<i>change_date</i>
-------------	--------------------

Description

Allow to add to a date second-minute-hour-day-month-year

Usage

```
change_date (
  date_,
  sep_,
  day_ = NA,
  month_ = NA,
  year_ = NA,
  hour_ = NA,
  min_ = NA,
  second_ = NA,
  frmt = "snhdmy"
)
```

Arguments

date_	is the input date
sep_	is the date separator
day_	is the day to add (can be negative)
month_	is the month to add (can be negative)
year_	is the year to add (can be negative)
hour_	is the hour to add (can be negative)
min_	is the minute to add (can be negative)
second_	is the second to add (can be negative)
frmt	is the format of the input date, (default set to "snhdmy" (second, minute, hour, day, month, year), so all variable are taken in count), if you only want to work with standard date for example change this variable to "dmy"

closest_date	<i>closest_date</i>
--------------	---------------------

Description

return the closest dates from a vector compared to the input date

Usage

```
closest_date(
  vec,
  date_,
  frmt,
  sep_ = "/",
  sep_vec = "/",
  only_ = "both",
  head = NA
)
```

Arguments

<code>vec</code>	is a vector containing the dates to be compared to the input date
<code>date_</code>	is the input date
<code>frmt</code>	is the format of the input date, (default set to "snhdmy" (second, minute, hour, day, month, year), so all variable are taken in count), if you only want to work with standard date for example change this variable to "dmy"
<code>sep_</code>	is the separator for the input date
<code>sep_vec</code>	is the separator for the dates contained in <code>vec</code>
<code>only_</code>	is can be changed to "+" or "-" to repectively only return the higher dates and the lower dates (default set to "both")
<code>head</code>	is the number of dates that will be returned (default set to NA so all dates in <code>vec</code> will be returned)

<code>cost_and_taxes</code>	<i>cost_and_taxes</i>
-----------------------------	-----------------------

Description

Allow to calculate basic variables related to cost and taxes from a bunch of products (elements) So put every variable you know in the following order:

Usage

```
cost_and_taxes(
  qte = NA,
  pu = NA,
  prix_ht = NA,
  tva = NA,
  prix_ttc = NA,
  prix_tva = NA,
  pu_ttc = NA,
  adjust = NA,
  prix_d_ht = NA,
  prix_d_ttc = NA,
  pu_d = NA,
  pu_d_ttc = NA
)
```

Arguments

qte	is the quantity of elements
pu	is the price of a single elements without taxes
prix_ht	is the duty-free price of the whole set of elements
tva	is the percentage of all taxes
prix_ttc	is the price of all the elements with taxes
prix_tva	is the cost of all the taxes
pu_ttc	is the price of a single element taxes included
adjust	is the discount percentage
prix_d_ht	is the free-duty price of an element after discount
prix_d_ttc	is the price with taxes of an element after discount
pu_d	is the price of a single element after discount and without taxes
pu_d_ttc	is the free-duty price of a single element after discount the function return a vector with the previous variables in the same order those that could not be calculated will be represented with NA value

data_gen

*data_gen***Description**

Allo to generate in a csv all kind of data you can imagine according to what you provide

Usage

```
data_gen(
  type_ = c("number", "mixed", "string"),
  strt_l = c(0, 0, 10),
  nb_r = c(50, 10, 40),
  output = "gened.csv",
  properties = c("1-5", "1-5", "1-5"),
  type_distrib = c("random", "random", "random"),
  str_source = c("a", "b", "c", "d", "e", "f", "g", "h", "i", "j", "k", "l", "m",
    "o", "p", "q", "r", "s", "t", "u", "v", "w", "x", "y", "z"),
  round_l = c(0, 0, 0),
  sep_ = ",",
)
```

Arguments

type_	is a vector for wich argument is a column, a column can be made of numbers ("number"), string ("string") or both ("mixed")
strt_l	is a vector containing for each column the row from which the data will begin to be generated
nb_r	is a vector containing for each column, the number of row full from generated data

output	is the name of the output csv file
properties	is linked to type_distri because it is the parameters ("min_val-max_val") for "random type", ("u-x") for the poisson distribution, ("u-d") for gaussian distribution
type_distri	is a vector which, for each column, associate a type of distribution ("random", "poisson", "gaussian"), it means that not only the number but also the length of the string will be randomly generated according to these distribution laws
str_source	is the source (vector) from which the character creating random string are (default set to the occidental alphabet)
round_l	is a vector which, for each column containing number, associate a round value
sep_	is the separator used to write data in the csv

Value

new generated data in addition to saving it in the output

data_mesup	<i>data_mesup</i>
------------	-------------------

Description

Allow to automatically arrange 1 dimensional data according to vector and parameters

Usage

```
data_mesup(
  data,
  cols = NA,
  file_ = NA,
  sep_ = ";",
  organisation = c(2, 1, 0),
  unic_sep1 = "_",
  unic_sep2 = "-"
)
```

Arguments

data	is the data provided (vector) each column is separated by a unic separator and each dataset from the same column is separated by another unic separator (ex: c("", c("d", "-", "e", "-", "f"), "", c("a", "a1", "-", "b", "-", "c", "c1")) "_")
cols	is the colnames of the data generated in a csv
file_	is the file to which the data will be outputed
sep_	is the separator of the csv outputed
organisation	is the way variables include themselves, for instance ,resuming precedent example, if organisation=c(1, 0) so the data output will be: d, a d, a1 e, c f, c f, c1
unic_sep1	is the unic separator between variables (default is "_")
unic_sep2	is the unic separator between datasets (default is "-")

date_sort	<i>date_sort</i>
-----------	------------------

Description

Allow to ascendely or desendely sort dates in a vector.

Usage

```
date_sort(vec, asc = F, sep = "-")
```

Arguments

vec	is the vector containing the dates.
asc	is a boolean variable, that if set to TRUE will sort the dates ascendely and descendely if set to FALSE
sep	is the separator of the date strings ex: "11-12-1998" the separator is "-"

days_from_month	<i>days_from_month</i>
-----------------	------------------------

Description

Allow to find the number of days month from a month date, take in count leap year

Usage

```
days_from_month(date_, sep_)
```

Arguments

date_	is the input date
sep_	is the separator of the input date

df_tuned	<i>df_tuned</i>
----------	-----------------

Description

Allow to return a list from a dataframe following these rules: First situation, I want the vectors from the returned list be composed of values that are separated by special values contained in a vector ex: data.frame(c(1, 1, 2, 1), c(1, 1, 2, 1), c(1, 1, 1, 2)) will return list(c(1, 1), c(1, 1, 1), c(1, 1, 1, 1)) or list(c(1, 1, 2), c(1, 1, 1, 2), c(1, 1, 1, 1, 2)) if i have chosen to take in count the 2. As you noticed here the value to stop is 2 but it can be several contained in a vector Second situation: I want to return a list for every jump of 3. If i take this dataframe data.frame(c(1, 1, 2, 1, 4, 4), c(1, 1, 2, 1, 3, 3), c(1, 1, 1, 2, 3, 3)) it will return list(c(1, 1, 2), c(1, 4, 4), c(1, 1, 2), c(1, 3, 3), c(1, 1, 1), c(2, 3, 3))

Usage

```
df_tuned(df, val_to_stop, index_rc = NA, included = "yes")
```

Arguments

df	is the input data.frame
val_to_stop	is the vector containing the values to stop
index_rc	is the value for the jump (default set to NA so default will be first case)
included	is if the values to stop has to be also returned in the vectors (defaultn set to "yes")

diff_xlsx	<i>diff_xlsx</i>
-----------	------------------

Description

Allow to see the difference between two datasets and output it into an xlsx file. If the dimensions of the new datasets are bigger than the old one, only the matching cells will be compared, if the dimensions of the new one are lower than the old one, there will be an error.

Usage

```
diff_xlsx(
  file_,
  sht,
  v_old_begin,
  v_old_end,
  v_new_begin,
  v_new_end,
  df2 = NA,
  overwrite = T,
  color_ = "red",
  pattern = "",
  output = "out.xlsx",
  new_val = T,
  pattern_only = T
)
```

Arguments

<code>file_</code>	is the file where the data is
<code>sht</code>	is the sheet where the data is
<code>v_old_begin</code>	is a vector containing the coordinates (row, column) where the data to be compared starts
<code>v_old_end</code>	is the same but for its end
<code>v_new_begin</code>	is the coordinates where the comparator data starts
<code>v_new_end</code>	is the same but for its end If the dimensions of the new datasets are bigger than the old one, only the matching cells will be compared, if the dimensions of the new one are lower than the old one, there will be an error.
<code>df2</code>	is optional, if the comparator dataset is directly a dataframe
<code>overwrite</code>	allow to overwrite differences is (set to T by default)
<code>color_</code>	is the color the differences will be outputed
<code>pattern</code>	is the pattern that will be added to the differences if overwritten is set to TRUE
<code>output</code>	is the name of the outputed xlsx (can be set to NA if no output)
<code>new_val</code>	if overwrite is TRUE, then the differences will be overwritten by the comparator data
<code>pattern_only</code>	will cover differences by pattern if overwritten is set to TRUE

 extrm_dates

extrm_dates

Description

Allow to find the minimum or the maximum of a date in a vector. The format of dates is Year/Month/Day.

Usage

```
extrm_dates(inpt_l, extrm = "min", sep = "-")
```

Arguments

<code>inpt_l</code>	is the input vector
<code>extrm</code>	is either "min" or "max", defaults to "min"
<code>sep</code>	is the separator of the dates, defaults to "-"

`file_rec`*file_rec*

Description

Allow to get all the files recursively from a path according to an end and start depth value. If you want to have an other version of this function that uses a more sophisticated algorithm (which can be faster), check `file_rec2`. Depth example: if i have `dir/dir2/dir3`, `dir/dir2b/dir3b`, i have a depth equal to 3

Usage

```
file_rec(xmax, xmin = 1, pathc = ".")
```

Arguments

<code>xmax</code>	is the end depth value
<code>xmin</code>	is the start depth value
<code>pathc</code>	is the reference path

`file_rec2`*file_rec2*

Description

Allow to find the directories and the subdirectories with a specified end and start depth value from a path. This function might be more powerfull than `file_rec` because it uses a custom algorithm that does not need to perform a full recursive search before tuning it to only find the directories with a good value of depth. Depth example: if i have `dir/dir2/dir3`, `dir/dir2b/dir3b`, i have a depth equal to 3

Usage

```
file_rec2(xmax, xmin = 1, pathc = ".")
```

Arguments

<code>xmax</code>	is the depth value
<code>xmin</code>	is the minimum value of depth
<code>pathc</code>	is the reference path, from which depth value is equal to 1

fillr

fillr

Description

Allow to fill a vector by the last element n times

Usage

```
fillr(inpt_v, ptrn_fill = "...\\d")
```

Arguments

inpt_v	is the input vector
ptrn_fill	is the pattern used to detect where the function has to fill the vector by the last element n times. It defaults to "...\\d" where "\\d" is the regex for an int value. So this paramater has to have "\\d" which designates n.

Examples

```
fillr(c("a", "b", "...3", "c"))
```

format_date

format_date

Description

Allow to convert xx-month-xxxx date type to xx-xx-xxxx

Usage

```
format_date(f_dialect, sentc, sep_in = "-", sep_out = "-")
```

Arguments

f_dialect	are the months from the language of which the month come
sentc	is the date to convert
sep_in	is the separator of the dat input (default is "-")
sep_out	is the separator of the converted date (default is "-")

 geo_min

geo_min

Description

Return a dataframe containing the nearest geographical points (row) according to established geographical points (column).

Usage

```
geo_min(inpt_df, established_df)
```

Arguments

`inpt_df` is the input dataframe of the set of geographical points to be classified, its first column is for latitude, the second for the longitude and the third, if exists, is for the altitude. Each point is one row.

`established_df` is the dataframe containing the coordinates of the established geographical points

Examples

```
in_ <- data.frame(c(11, 33, 55), c(113, -143, 167))

in2_ <- data.frame(c(12, 55), c(115, 165))

print(geo_min(inpt_df=in_, established_df=in2_))

in_ <- data.frame(c(51, 23, 55), c(113, -143, 167), c(6, 5, 1))

in2_ <- data.frame(c(12, 55), c(115, 165), c(2, 5))

geo_min(inpt_df=in_, established_df=in2_)
```

 get_rec

get_rec

Description

Allow to get the value of directory depth from a path.

Usage

```
get_rec(pathc = ".")
```

Arguments

`pathc` is the reference path example: if i have dir/dir2/dir3, dir/dir2b/dir3b, i have a depth equal to 3

globe	<i>globe</i>
-------	--------------

Description

Allow to calculate the distances between a set of geographical points and another established geographical point. If the altitude is not filled, so the result returned won't take in count the altitude.

Usage

```
globe(lat_f, long_f, alt_f = NA, lat_n, long_n, alt_n = NA)
```

Arguments

lat_f	is the latitude of the established geographical point
long_f	is the longitude of the established geographical point
alt_f	is the altitude of the established geographical point, defaults to NA
lat_n	is a vector containing the latitude of the set of points
long_n	is a vector containing the longitude of the set of points
alt_n	is a vector containing the altitude of the set of points, defaults to NA

Examples

```
globe(lat_f=23, long_f=112, alt_f=NA, lat_n=c(2, 82), long_n=c(165, -55), alt_n=NA)
```

groupr_df	<i>groupr_df</i>
-----------	------------------

Description

Allow to create groups from a dataframe. Indeed, you can create conditions that lead to a flag value for each cell of the input dataframe according to the cell value. This function is based on `see_df` and `nestr_df2` functions.

Usage

```
groupr_df(inpt_df, condition_lst, val_lst, conjunction_lst, rtn_val_pos = c())
```

Arguments

inpt_df	is the input dataframe
condition_lst	is a list containing all the condition as a vector for each group
val_lst	is a list containing all the values associated with condition_lst as a vector for each group
conjunction_lst	is a list containing all the conjunctions associated with condition_lst and val_lst as a vector for each group
rtn_val_pos	is a vector containing all the group flag value like this ex: c("flag1", "flag2", "flag3")

Examples

```

interactive()
df1 <- data.frame(c(1, 2, 1), c(45, 22, 88), c(44, 88, 33))

val_lst <- list(list(c(1), c(1)), list(c(2)), list(c(44)))

condition_lst <- list(c(">", "<"), c("%%", c("=="))

conjunction_lst <- list(c("|"), c(), c())

rtn_val_pos <- c("+", "+", "+")

grouppr_df(inpt_df=df1, val_lst=val_lst, condition_lst=condition_lst,
conjunction_lst=conjunction_lst, rtn_val_pos=rtn_val_pos)

```

insert_df

*insert_df***Description**

Allow to insert dataframe into another dataframe according to coordinates (row, column) from the dataframe that will be inserted

Usage

```
insert_df(df_in, df_ins, ins_loc)
```

Arguments

df_in	is the dataframe that will be inserted
df_ins	is the dataset to be inserted
ins_loc	is a vector containg two parameters (row, column) of the begining for the insertion

inter_max

*inter_max***Description**

Takes as input a list of vectors composed of ints or floats ascendly ordered (intervals) that can have a different step to one of another element ex: list(c(0, 2, 4), c(0, 4), c(1, 2, 2.3)) The function will return the list of lists altered according to the maximum step found in the input list.

Usage

```
inter_max(inpt_l, max_ = -1000, get_lst = T)
```

Arguments

inpt_l	is the input list
max_	is a value you are sure is the minimum step value of all the sub-lists
get_lst	is the parameter that, if set to True, will keep the last values of vectors in the return value if the last step exceeds the end value of the vector.

inter_min	<i>inter_min</i>
-----------	------------------

Description

Takes as input a list of vectors composed of ints or floats ascendly ordered (intervals) that can have a different step to one of another element ex: list(c(0, 2, 4), c(0, 4), c(1, 2, 2.3)) This function will return the list of vectors with the same steps preserving the begin and end value of each interval. The way the algorithm searches the common step of all the sub-lists is also given by the user as a parameter, see how_to paramaters.

Usage

```
inter_min(
  inpt_l,
  min_ = 1000,
  sensi = 3,
  sensi2 = 3,
  how_to_op = c("divide"),
  how_to_val = c(3)
)
```

Arguments

inpt_l	is the input list containing all the intervals
min_	is a value you are sure is superior to the maximum step value in all the intervals
sensi	is the decimal accuracy of how the difference between each value n to n+1 in an interval is calculated
sensi2	is the decimal accuracy of how the value with the common step is calculated in all the intervals
how_to_op	is a vector containing the operations to perform to the pre-common step value, defaults to only "divide". The operations can be "divide", "substract", "multiply" or "add". All type of operations can be in this parameter.
how_to_val	is a vector containing the value relatives to the operations in hot_to_op, defaults to 3 output from ex:

Examples

```
[[0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7,
.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.0],
5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 2.0, 2.1, 2.2, 2
, 2.9, 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.0], [1, 1.1, 1.2, 1.3, 1.4, 1.
2.1, 2.2, 2.3]]
```

letter_to_nb	<i>letter_to_nb</i>
--------------	---------------------

Description

Allow to get the number of a spreadsheet based column by the letter ex: AAA = 703

Usage

```
letter_to_nb(letter)
```

Arguments

letter is the letter (name of the column)

list_files	<i>list_files</i>
------------	-------------------

Description

A list.files() based function addressing the need of listing the files with extension a or or extension b ...

Usage

```
list_files(patternc, pathc = ".")
```

Arguments

patternc is a vector containing all the extensions you want
 pathc is the path, can be a vector of multiple path because list.files() supports it.

match_n	<i>match_n</i>
---------	----------------

Description

Allow to get the indexes for the nth occurrence of a value in a vector. Example: c(1, 2, 3, 1, 2), the first occurrence of 1 and 2 is at index 1 and 2 respectively, but the second occurrence is respectively at the 4th and 5th index.

Usage

```
match_n(vec, mc, n = 1, wnb = "#####")
```

Arguments

<code>vec</code>	is th input vector
<code>mc</code>	is a vector containing the values you want to get the index for the nth occurence in <code>vec</code>
<code>n</code>	is the value of the occurence
<code>wnb</code>	is a string you are sure is not in <code>mc</code>

`match_n2`*match_n2*

Description

Allow to get the indexes for the nth occurence of a value in a vector. Example: `c(1, 2, 3, 1, 2)`, the first occurence of 1 and 2 is at index 1 and 2 respectively, but the second occurence is respectively at the 4th and 5th index.

Usage

```
match_n2(vec, mc, n, wnb = "#####")
```

Arguments

<code>vec</code>	is th einput vector
<code>mc</code>	is a vector containing the values you want to get the index for the nth occurence in <code>vec</code>
<code>n</code>	is a vector containing the occurences for each value in <code>mc</code> so if i have <code>mc <- c(3, 27)</code> and <code>n <- c(1, 2)</code> , i want the first occurence for 3 and the second for 27 in <code>vec</code> . If the length of <code>n</code> is inferior of the length of <code>mc</code> , <code>m</code> will extend with its last value as new arguments. It means that if <code>mc <- c(3, 27)</code> but <code>n <- c(1)</code> so <code>n</code> will extend to <code>c(1, 1)</code> , so we will get the first occurence of 3 and 27 in <code>vec</code> .
<code>wnb</code>	is a string you are sure is not in <code>mc</code>

`multitud`*multitud*

Description

From a list containing vectors allow to generate a vector following this rule: `list(c("a", "b"), c("1", "2"), c("A", "Z", "E"))` -> `c("a1A", "a2A", "b1A", "b2A", "a1Z", ...)`

Usage

```
multitud(l, sep_ = "")
```

Arguments

<code>l</code>	is the list
<code>sep_</code>	is the separator between elements (default is set to "" as you see in the example)

nb_to_letter	<i>nb_to_letter</i>
--------------	---------------------

Description

Allow to get the letter of a spreadsheet based column by the number ex: 703 = AAA

Usage

```
nb_to_letter(x)
```

Arguments

x is the number of the column

nestr_df1	<i>nestr_df1</i>
-----------	------------------

Description

Allow to write a value (1a) to a dataframe (1b) to its cells that have the same coordinates (row and column) than the cells whose value is equal to a another special value (2a), from another another dataframe (2b). The value (1a) depends of the cell value coordinates of the third dataframe (3b). If a cell coordinates (1c) of the first dataframe (1b) do not correspond to the coordinates of a good returning cell value (2a) from the dataframe (2b), so this cell (1c) can have its value changed to the same cell coordinates value (3a) of a third dataframe (4b), if (4b) is not det to NA.

Usage

```
nestr_df1(inptf_df, inptt_pos_df, nestr_df, yes_val = T, inptt_neg_df = NA)
```

Arguments

inptf_df is the input dataframe (1b)
 inptt_pos_df is the dataframe (2b) that corresponds to the (1a) values
 nestr_df is the dataframe (2b) that has the special value (2a)
 yes_val is the special value (2a)
 inpt_neg_df is the dataframe (4b) that has the (3a) values, defaults to NA

Examples

```
nestr_df1(inptf_df=data.frame(c(1, 2, 1), c(1, 5, 7)),
inptt_pos_df=data.frame(c(4, 4, 3), c(2, 1, 2)),
inptt_neg_df=data.frame(c(44, 44, 33), c(12, 12, 12)),
nestr_df=data.frame(c(TRUE, FALSE, TRUE), c(FALSE, FALSE, TRUE)), yes_val=TRUE)
```

nestr_df2	<i>nestr_df2</i>
-----------	------------------

Description

Allow to write a special value (1a) in the cells of a dataframe (1b) that correspond (row and column) to those of another dataframe (2b) that return another special value (2a). The cells whose coordinates do not match the coordinates of the dataframe (2b), another special value can be written (3a) if not set to NA.

Usage

```
nestr_df2(inptf_df, rtn_pos, rtn_neg = NA, nestr_df, yes_val = T)
```

Arguments

inptf_df	is the input dataframe (1b)
rtn_pos	is the special value (1a)
rtn_neg	is the special value (3a)
nestr_df	is the dataframe (2b)
yes_val	is the special value (2a)

Examples

```
nestr_df2(inptf_df=data.frame(c(1, 2, 1), c(1, 5, 7)), rtn_pos="yes",
rtn_neg="no", nestr_df=data.frame(c(TRUE, FALSE, TRUE), c(FALSE, FALSE, TRUE)), yes_val=T)
```

occu	<i>occu</i>
------	-------------

Description

Allow to see the occurrence of each variable in a vector. Returns a dataframe with, as the first column, the all the unique variable of the vector and , in he second column, their occurrence respectively.

Usage

```
occu(inpt_v)
```

Arguments

inpt_v	the input dataframe
--------	---------------------

pattern_generator *pattern_generator*

Description

Allow to create patterns which have a part that is varying randomly each time.

Usage

```
pattern_generator(base_, from_, nb, hmn = 1, after = 1, sep = "")
```

Arguments

base_	is the pattern that will be kept
from_	is the vector from which the elements of the random part will be generated
nb	is the number of random pattern chosen for the varying part
hmn	is how many of varying pattern from the same base will be created
after	is set to 1 by default, it means that the varying part will be after the fixed part, set to 0 if you want the varying part to be before
sep	is the separator between all patterns in the returned value

pattern_gettr *pattern_gettr*

Description

Search for pattern(s) contained in a vector in another vector and return a list containing matched one (first index) and their position (second index) according to these rules: First case: Search for patterns strictly, it means that the searched pattern(s) will be matched only if the patterns contained in the vector that is being explored by the function are present like this c("pattern_searched", "other", ..., "pattern_searched") and not as c("other_thing pattern_searched other_thing", "other", ..., "pattern_searched other_thing") Second case: It is the opposite to the first case, it means that if the pattern is partially present like in the first position and the last, it will be considered like a matched pattern

Usage

```
pattern_gettr(
  word_,
  vct,
  occ = c(1),
  strict,
  btwn,
  all_in_word = "yes",
  notatall = "###"
)
```

Arguments

<code>word_</code>	is the vector containing the patterns
<code>vct</code>	is the vector being searched for patterns
<code>occ</code>	a vector containing the occurrence of the pattern in <code>word_</code> to be matched in the vector being searched, if the occurrence is 2 for the <code>nth</code> pattern in <code>word_</code> and only one occurrence is found in <code>vct</code> so no pattern will be matched, put "forever" to no longer depend on the occurrence for the associated pattern
<code>strict</code>	a vector containing the "strict" condition for each <code>nth</code> vector in <code>word_</code> ("strict" is the string to activate this option)
<code>btwn</code>	is a vector containing the condition ("yes" to activate this option) meaning that if "yes", all elements between two matched pattern in <code>vct</code> will be returned , so the patterns you enter in <code>word_</code> have to be in the order you think it will appear in <code>vct</code>
<code>all_in_word</code>	is a value (default set to "yes", "no" to activate this option) that, if activated, won't authorized a previous matched pattern to be matched again
<code>notatall</code>	is a string that you are sure is not present in <code>vct</code> REGEX can also be used as pattern

<code>pattern_tuning</code>	<i>pattern_tuning</i>
-----------------------------	-----------------------

Description

Allow to tune a pattern very precisely and output a vector containing its variations `n` times.

Usage

```
pattern_tuning(pattn, spe_nb, spe_l, exclude_type, hmn = 1, rg = c(0, 0))
```

Arguments

<code>pattn</code>	is the character that will be tuned
<code>spe_nb</code>	is the number of new character that will be replaced
<code>spe_l</code>	is the source vector from which the new characters will replace old ones
<code>exclude_type</code>	is character that won't be replaced
<code>hmn</code>	is how many output the function will return
<code>rg</code>	is a vector with two parameters (index of the first letter that will be replaced, index of the last letter that will be replaced) default is set to all the letters from the source pattern

ptrn_switchr	<i>ptrn_switchr</i>
--------------	---------------------

Description

Allow to switch, copy pattern for each element in a vector. Here a pattern is the values that are separated by a same separator. Example: "xx-xxx-xx" or "xx/xx/xxxx". The xx like values can be swiched or copied from whatever index to whatever index. Here, the index is like this 1-2-3 etcetera, it is relative of the separator.

Usage

```
ptrn_switchr(inpt_l, f_idx_l = c(), t_idx_l = c(), sep = "-", default_val = NA)
```

Arguments

inpt_l	is the input vector
f_idx_l	is a vector containing the indexes of the pattern you want to be altered.
t_idx_l	is a vector containing the indexes to which the indexes in f_idx_l are related.
sep	is the separator, defaults to "-"
default_val	is the default value , if not set to NA, of the pattern at the indexes in f_idx_l. If it is not set to NA, you do not need to fill t_idx_l because this is the vector containing the indexes of the patterns that will be set as new values relatively to the indexes in f_idx_l. Defaults to NA.

Examples

```
ptrn_switchr(inpt_l=c("2022-01-11", "2022-01-14", "2022-01-21",  
"2022-01-01"), f_idx_l=c(1, 2, 3), t_idx_l=c(3, 2, 1))  
ptrn_switchr(inpt_l=c("2022-01-11", "2022-01-14", "2022-01-21",  
"2022-01-01"), f_idx_l=c(1), default_val="ee")
```

ptrn_twkr	<i>ptrn_twkr</i>
-----------	------------------

Description

Allow to modify the pattern length of element in a vector according to arguments. What is here defined as a pattern is something like this xx-xx-xx or xx/xx/xxx... So it is defined by the separator

Usage

```
ptrn_twkr(inpt_l, depth = "max", sep = "-", default_val = "0", add_sep = T)
```

Arguments

<code>inpt_l</code>	is the input vector
<code>depth</code>	is the number (numeric) of separator it will keep as a result. To keep the number of separator of the element that has the minimum amount of separator do <code>depth="min"</code> and <code>depth="max"</code> (character) for the opposite. This value defaults to "max".
<code>sep</code>	is the separator of the pattern, defaults to "-"
<code>default_val</code>	is the default val that will be placed between the separator, defaults to "00"
<code>add_sep</code>	defaults to TRUE. If set to FALSE, it will remove the separator for the patterns that are included in the interval between the depth amount of separator and the actual number of separator of the element.

Examples

```
library("stringr")
v <- c("2012-06-22", "2012-06-23", "2022-09-12", "2022")
ptrn_twkr(inpt_l=v, depth="max", sep="-", default_val="00", add_sep=TRUE)
```

`see_df`*see_df*

Description

Allow to return a dataframe with special value cells (ex: TRUE) where the condition entered are respected and another special value cell (ex: FALSE) where these are not

Usage

```
see_df(df, condition_l, val_l, conjunction_l = c(), rt_val = T, f_val = F)
```

Arguments

<code>df</code>	is the input dataframe
<code>condition_l</code>	is the vector of the possible conditions (" <code>==</code> ", " <code>></code> ", " <code><</code> ", " <code>!=</code> ", " <code>%%</code> ") (equal, greater than, lower than, not equal to, is divisible by), you can put the same condition n times.
<code>val_l</code>	is the list of vectors containing the values related to <code>condition_l</code> (so the vector of values has to be placed in the same order)
<code>conjunction_l</code>	contains the <code> </code> or <code>&</code> conjunctions, so if the length of <code>condition_l</code> is equal to 3, there will be 2 conjunctions. If the length of <code>conjunction_l</code> is inferior to the length of <code>condition_l</code> minus 1, <code>conjunction_l</code> will match its goal length value with its last argument as the last arguments. For example, <code>c("&", " ", "&")</code> with a goal length value of 5 → <code>c("&", " ", "&", "&", "&")</code>
<code>rt_val</code>	is a special value cell returned when the conditions are respected
<code>f_val</code>	is a special value cell returned when the conditions are not respected

Details

This function will return an error if number only comparative conditions are given in addition to having character values in the input dataframe.

see_file	<i>see_file</i>
----------	-----------------

Description

Allow to get the filename or its extension

Usage

```
see_file(string_, index_ext = 1, ext = T)
```

Arguments

string_	is the input string
index_ext	is the occurrence of the dot that separates the filename and its extension
ext	is a boolean that if set to TRUE, will return the file extension and if set to FALSE, will return filename

see_idx	<i>see_idx</i>
---------	----------------

Description

Allow to find the indexes of the elements of the first vector in the second. If the element(s) is not found, the element returned at the same index will be "FALSE".

Usage

```
see_idx(v1, v2, exclude_val = "#####", no_more = F)
```

Arguments

v1	is the first vector
v2	is the second vector
exclude_val	is a value you know is not present in the 2 vectors
no_more	is a boolean that, if set to TRUE, will remove all the first found value in the second vector after those has been found. It defaults to FALSE.

see_inside	<i>see_inside</i>
------------	-------------------

Description

Return a list containing all the column of the files in the current directory with a chosen file extension and its associated file and sheet if xlsx. For example if i have 2 files "out.csv" with 2 columns and "out.xlsx" with 1 column for its first sheet and 2 for its second one, the return will look like this: c(column_1, column_2, column_3, column_4, column_5, unique_separator, "1-2-out.csv", "3-3-sheet_1-out.xlsx", 4-5-sheet_2-out.xlsx)

Usage

```
see_inside(pattern_, path_ = ".", sep_ = c(", "), unique_sep = "#####", rec = F)
```

Arguments

- pattern_ is a vector containin the file extension of the spreadsheets ("xlsx", "csv"...)
- path_ is the path where are located the files
- sep_ is a vector containing the separator for each csv type file in order following the operating system file order, if the vector does not match the number of the csv files found, it will assume the separator for the rest of the files is the same as the last csv file found. It means that if you know the separator is the same for all the csv type files, you just have to put the separator once in the vector.
- unique_sep is a pattern that you know will never be in your input files
- rec is a boolean allows to get files recursively if set to TRUE, defaults to TRUE If x is the return value, to see all the files name, position of the columns and possible sheet name associated with, do the following: Examples: print(x[(grep(unique_sep, x)1+1):length(x)]) #If you just want to see the columns do the following: print(x1:(grep(unique_sep, x) - 1))

unique_pos	<i>unique_pos</i>
------------	-------------------

Description

Allow to find indexes of the unique values from a vector.

Usage

```
unique_pos(vec)
```

Arguments

- vec is the input vector

until_stnl	<i>until_stnl</i>
------------	-------------------

Description

Maxes a vector to a chosen length ex: if i want my vector c(1, 2) to be 5 of length this function will return me: c(1, 2, 1, 2, 1)

Usage

```
until_stnl(vec1, goal)
```

Arguments

vec1	is the input vector
goal	is the length to reach

val_replacer	<i>val_replacer</i>
--------------	---------------------

Description

Allow to replace value from dataframe to another one.

Usage

```
val_replacer(df, val_replaced, val_replacor = T, df_rpt = NA)
```

Arguments

df	is the input dataframe
val_replaced	is a vector of the value(s) to be replaced
val_replacor	is the value that will replace val_replaced
df_rpt	is the replacement matrix and has to be the same dimension as df. Only the indexes that are equal to TRUE will be authorized indexes for the values to be replaced in the input matrix

<code>vec_in_df</code>	<i>vec_in_df</i>
------------------------	------------------

Description

Allow to see if vectors are present in a dataframe ex: 1, 2, 1 3, 4, 1 1, 5, 8 the vector c(4, 1) with the coefficient 1 and the start position at the second column is contained in the dataframe

Usage

```
vec_in_df(df_, vec_l, coeff_, strt_l, distinct = "NA")
```

Arguments

<code>df_</code>	is the input dataframe
<code>vec_l</code>	is a list the vectors
<code>coeff_</code>	is the related coefficient of the vector
<code>strt_l</code>	is a vector containing the start position for each vector
<code>distinct</code>	is a value you are sure is not in <code>df_</code> , defaults to "NA"

<code>vlookup_df</code>	<i>vlookup_df</i>
-------------------------	-------------------

Description

Allow to perform a vlookup on a dataframe

Usage

```
vlookup_df(df, v_id, col_id = 1, included_col_id = "yes")
```

Arguments

<code>df</code>	is the input dataframe
<code>v_id</code>	is a vector containing the ids
<code>col_id</code>	is the column that contains the ids (default is equal to 1)
<code>included_col_id</code>	is if the result should return the <code>col_id</code> (default set to yes)

`v_to_df`*v_to_df*

Description

Allow to convert a vector to a dataframe according to a separator.

Usage

```
v_to_df(inpt_v, sep = "-")
```

Arguments

<code>inpt_v</code>	is the input vector
<code>sep</code>	is the separator used to seprate the columns

Examples

```
library("stringr")  
v <- c("aa-yy-uu", "zz-gg-hhh", "zz-gg-hhh", "zz-gg-hhh")  
v_to_df(inpt_v=v, sep="-")
```

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