orderFactors

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orderFactors

Structure of Tiramisu data.frame

```
str(Tiramisu)
```

```
## 'data.frame':    291 obs. of  21 variables:
##  $ ill        : int  1 1 1 1 1 1 1 1 1 1 ...
##  $ dateonset  : Date, format: "1998-06-27" "1998-06-27" ...
##  $ sex        : Factor w/ 2 levels "females","males": 2 1 2 1 2 1 1 1 2 1 ...
##  $ age        : int  18 57 56 17 19 16 19 19 40 53 ...
##  $ tira       : int  1 1 0 1 1 1 1 1 1 1 ...
##  $ tportion   : int  3 1 0 1 2 2 3 2 2 1 ...
##  $ wmousse    : int  0 0 0 1 0 1 0 1 1 1 ...
##  $ dmousse    : int  1 1 0 0 0 1 1 1 1 1 ...
##  $ mousse     : int  1 1 0 1 0 1 1 1 1 1 ...
##  $ mportion   : int  1 1 0 NA 0 1 1 1 2 1 ...
##  $ beer       : int  0 0 0 0 1 0 0 0 1 0 ...
##  $ uniquekey  : num  210 12 288 186 20 148 201 106 272 50 ...
##  $ redjelly   : int  0 0 0 1 0 0 0 1 0 1 ...
##  $ fruitsalad : int  0 1 0 0 0 1 1 1 0 0 ...
##  $ tomato     : int  0 0 1 0 0 0 0 0 1 0 ...
##  $ mince      : int  0 1 1 0 0 1 0 0 0 0 ...
##  $ salmon     : int  0 1 1 9 0 1 0 0 1 1 ...
##  $ horseradish: int  0 1 0 0 0 0 0 1 0 1 ...
##  $ chickenwin : int  0 0 0 0 0 1 0 1 0 1 ...
##  $ roastbeef  : int  0 0 0 0 0 0 0 0 1 0 ...
##  $ pork       : int  1 0 0 9 0 0 0 0 0 0 ...
##  - attr(*, "datalabel")= chr ""
##  - attr(*, "time.stamp")= chr "22 Jan 2009 14:47"
##  - attr(*, "formats")= chr  "%8.0g" "%dD_m_Y" "%8.0g" "%8.0g" ...
##  - attr(*, "types")= int  251 253 251 251 251 251 251 251 251 251 ...
##  - attr(*, "val.labels")= chr  "" "" "sex" "" ...
##  - attr(*, "var.labels")= chr  "" "dateonset" "" "" ...
##  - attr(*, "version")= int 12
##  - attr(*, "label.table")=List of 1
##   ..$ sex: Named num  0 1
##   .. ..- attr(*, "names")= chr  "females" "males"
```

NB: in the examples above, results show only modified columns

orderFactors ill with automatic labels from values

```
# Here we transform a single binary (0,1) variable to an ordered factor (1,0)
df <- orderFactors(Tiramisu, "ill", values = c(1,0))
```

```
##  Ord.factor w/ 2 levels "1"<"0": 1 1 1 1 1 1 1 1 1 1 ...
```

```
# Same with an unquoted variable
df <- orderFactors(Tiramisu, ill, values = c(1,0))
```

```
##  Ord.factor w/ 2 levels "1"<"0": 1 1 1 1 1 1 1 1 1 1 ...
```

---

orderFactors ill, tira, mousse with automatic labels from values

---

```
# Here we transform 3 binary (0,1) variables to an ordered factor (1,0)
df <- orderFactors(Tiramisu, c("ill", "tira", "mousse") , values = c(1,0))
```

```
## 'data.frame':    291 obs. of  3 variables:
##  $ ill   : Ord.factor w/ 2 levels "1"<"0": 1 1 1 1 1 1 1 1 1 1 ...
##  $ tira  : Ord.factor w/ 2 levels "1"<"0": 1 1 2 1 1 1 1 1 1 1 ...
##  $ mousse: Ord.factor w/ 2 levels "1"<"0": 1 1 2 1 2 1 1 1 1 1 ...
```

```
# Same with an unquoted list of variables
df <- orderFactors(Tiramisu, ill, tira, mousse , values = c(1,0))
```

```
## 'data.frame':    291 obs. of  3 variables:
##  $ ill   : Ord.factor w/ 2 levels "1"<"0": 1 1 1 1 1 1 1 1 1 1 ...
##  $ tira  : Ord.factor w/ 2 levels "1"<"0": 1 1 2 1 1 1 1 1 1 1 ...
##  $ mousse: Ord.factor w/ 2 levels "1"<"0": 1 1 2 1 2 1 1 1 1 1 ...
```

---

orderFactors ill, tira, beer with YES/NO labels

```
df <- orderFactors(Tiramisu, ill, tira, beer, values = c(1,0), labels = c("YES", "NO"))
```

```
## 'data.frame':    291 obs. of  3 variables:
##  $ ill : Ord.factor w/ 2 levels "YES"<"NO": 1 1 1 1 1 1 1 1 1 1 ...
##  $ tira: Ord.factor w/ 2 levels "YES"<"NO": 1 1 2 1 1 1 1 1 1 1 ...
##  $ beer: Ord.factor w/ 2 levels "YES"<"NO": 2 2 2 2 1 2 2 2 1 2 ...
```

---

orderFactors sex (males, females) M/F labels

```
df <- orderFactors(Tiramisu, sex, values = c("males", "females"), labels = c("M", "F"))
```

```
##  Ord.factor w/ 2 levels "M"<"F": 1 2 1 2 1 2 2 2 1 2 ...
```

---

orderFactors ill, tira, wmousse, dmouse, mousse by numerical index of columns

---

```
df <- orderFactors(Tiramisu, c(1, 5, 7, 8, 9), values = c(1, 0), labels = c("Y", "N"))
```

```
## 'data.frame':    291 obs. of  5 variables:
##  $ ill    : Ord.factor w/ 2 levels "Y"<"N": 1 1 1 1 1 1 1 1 1 1 ...
##  $ tira   : Ord.factor w/ 2 levels "Y"<"N": 1 1 2 1 1 1 1 1 1 1 ...
##  $ wmousse: Ord.factor w/ 2 levels "Y"<"N": 2 2 2 1 2 1 2 1 1 1 ...
##  $ dmousse: Ord.factor w/ 2 levels "Y"<"N": 1 1 2 2 2 1 1 1 1 1 ...
##  $ mousse : Ord.factor w/ 2 levels "Y"<"N": 1 1 2 1 2 1 1 1 1 1 ...
```

---

orderFactors wmousse, dmouse, mousse by a range of numerical index of columns

---

```
df <- orderFactors(Tiramisu, 7:9 , values = c(1, 0), labels = c("Y", "N"))
```

```
## 'data.frame':    291 obs. of  3 variables:
##  $ wmousse: Ord.factor w/ 2 levels "Y"<"N": 2 2 2 1 2 1 2 1 1 1 ...
##  $ dmousse: Ord.factor w/ 2 levels "Y"<"N": 1 1 2 2 2 1 1 1 1 1 ...
##  $ mousse : Ord.factor w/ 2 levels "Y"<"N": 1 1 2 1 2 1 1 1 1 1 ...
```

---

orderFactors ill, tira, wmousse, dmouse, mousse by mixed values and range of numerical index of columns

---

```
df <- orderFactors(Tiramisu, c(1, 5, 7:9) , values = c(1, 0), labels = c("Y", "N"))
```

```
## 'data.frame':    291 obs. of  5 variables:
##  $ ill    : Ord.factor w/ 2 levels "Y"<"N": 1 1 1 1 1 1 1 1 1 1 ...
##  $ tira   : Ord.factor w/ 2 levels "Y"<"N": 1 1 2 1 1 1 1 1 1 1 ...
##  $ wmousse: Ord.factor w/ 2 levels "Y"<"N": 2 2 2 1 2 1 2 1 1 1 ...
##  $ dmousse: Ord.factor w/ 2 levels "Y"<"N": 1 1 2 2 2 1 1 1 1 1 ...
##  $ mousse : Ord.factor w/ 2 levels "Y"<"N": 1 1 2 1 2 1 1 1 1 1 ...
```

You can use pipe (%>%) too

```
df <- Tiramisu %>% orderFactors("ill", values = c(1,0)) %>%
  orderFactors(tira, values = c(1,0), labels = c("YES", "NO")) %>%
   orderFactors(sex, values = c("males", "females"), labels = c("M", "F")) %>%
  orderFactors(7:9, values = c(1,0), labels = c("YES", "NO")) %>%
  orderFactors(c(11, 13:15), values = c(1,0), labels = c("YES", "NO")) %>%
  orderFactors(mince, salmon, horseradish, chickenwin, values = c(1,0), labels = c("YES", "NO")) %>%
  orderFactors(c("roastbeef", "pork"), values = c(1,0), labels = c("YES", "NO"))
```

```
## 'data.frame':    291 obs. of  16 variables:
##  $ ill        : Ord.factor w/ 2 levels "1"<"0": 1 1 1 1 1 1 1 1 1 1 ...
##  $ sex        : Ord.factor w/ 2 levels "M"<"F": 1 2 1 2 1 2 2 2 1 2 ...
##  $ tira       : Ord.factor w/ 2 levels "YES"<"NO": 1 1 2 1 1 1 1 1 1 1 ...
##  $ wmousse    : Ord.factor w/ 2 levels "YES"<"NO": 2 2 2 1 2 1 2 1 1 1 ...
##  $ dmousse    : Ord.factor w/ 2 levels "YES"<"NO": 1 1 2 2 2 1 1 1 1 1 ...
##  $ mousse     : Ord.factor w/ 2 levels "YES"<"NO": 1 1 2 1 2 1 1 1 1 1 ...
##  $ beer       : Ord.factor w/ 2 levels "YES"<"NO": 2 2 2 2 1 2 2 2 1 2 ...
##  $ redjelly   : Ord.factor w/ 2 levels "YES"<"NO": 2 2 2 1 2 2 2 1 2 1 ...
##  $ fruitsalad : Ord.factor w/ 2 levels "YES"<"NO": 2 1 2 2 2 1 1 1 2 2 ...
##  $ tomato     : Ord.factor w/ 2 levels "YES"<"NO": 2 2 1 2 2 2 2 2 1 2 ...
##  $ mince      : Ord.factor w/ 2 levels "YES"<"NO": 2 1 1 2 2 1 2 2 2 2 ...
##  $ salmon     : Ord.factor w/ 2 levels "YES"<"NO": 2 1 1 NA 2 1 2 2 1 1 ...
##  $ horseradish: Ord.factor w/ 2 levels "YES"<"NO": 2 1 2 2 2 2 2 1 2 1 ...
##  $ chickenwin : Ord.factor w/ 2 levels "YES"<"NO": 2 2 2 2 2 1 2 1 2 1 ...
##  $ roastbeef  : Ord.factor w/ 2 levels "YES"<"NO": 2 2 2 2 2 2 2 2 1 2 ...
##  $ pork       : Ord.factor w/ 2 levels "YES"<"NO": 1 2 2 NA 2 2 2 2 2 2 ...
```

... or more condensed

```
df <- Tiramisu %>%
  orderFactors(c(1, 5, 7:9, 11, 13:21) , values = c(1,0), labels = c("YES", "NO")) %>%
  orderFactors(sex, values = c("males", "females"), labels = c("M", "F"))
```

```
## 'data.frame':    291 obs. of  16 variables:
##  $ ill        : Ord.factor w/ 2 levels "YES"<"NO": 1 1 1 1 1 1 1 1 1 1 ...
##  $ sex        : Ord.factor w/ 2 levels "M"<"F": 1 2 1 2 1 2 2 2 1 2 ...
##  $ tira       : Ord.factor w/ 2 levels "YES"<"NO": 1 1 2 1 1 1 1 1 1 1 ...
##  $ wmousse    : Ord.factor w/ 2 levels "YES"<"NO": 2 2 2 1 2 1 2 1 1 1 ...
##  $ dmousse    : Ord.factor w/ 2 levels "YES"<"NO": 1 1 2 2 2 1 1 1 1 1 ...
##  $ mousse     : Ord.factor w/ 2 levels "YES"<"NO": 1 1 2 1 2 1 1 1 1 1 ...
##  $ beer       : Ord.factor w/ 2 levels "YES"<"NO": 2 2 2 2 1 2 2 2 1 2 ...
##  $ redjelly   : Ord.factor w/ 2 levels "YES"<"NO": 2 2 2 1 2 2 2 1 2 1 ...
##  $ fruitsalad : Ord.factor w/ 2 levels "YES"<"NO": 2 1 2 2 2 1 1 1 2 2 ...
##  $ tomato     : Ord.factor w/ 2 levels "YES"<"NO": 2 2 1 2 2 2 2 2 1 2 ...
##  $ mince      : Ord.factor w/ 2 levels "YES"<"NO": 2 1 1 2 2 1 2 2 2 2 ...
##  $ salmon     : Ord.factor w/ 2 levels "YES"<"NO": 2 1 1 NA 2 1 2 2 1 1 ...
##  $ horseradish: Ord.factor w/ 2 levels "YES"<"NO": 2 1 2 2 2 2 2 1 2 1 ...
##  $ chickenwin : Ord.factor w/ 2 levels "YES"<"NO": 2 2 2 2 2 1 2 1 2 1 ...
##  $ roastbeef  : Ord.factor w/ 2 levels "YES"<"NO": 2 2 2 2 2 2 2 2 1 2 ...
##  $ pork       : Ord.factor w/ 2 levels "YES"<"NO": 1 2 2 NA 2 2 2 2 2 2 ...
```