Minimal example

Case 1: Command redundant does more than just removing redundant inequalities

```
library(rcdd)
```

```
## If you want correct answers, use rational arithmetic.
## See the Warnings sections in help pages for
##     functions that do computational geometry.
```

```
a1 =
  rbind(c("1" ,"0" , "0" ),
        c("-1" , "0",  "0" ),
        c("1" , "0",  "0" ),
        c("-1","0" , "0" ))

b1 = c( "1/2", "-1/2" , "1"   ,  "0"   )

h_rep = makeH(a1,b1)

h_rep
```

```
##      [,1] [,2]   [,3] [,4] [,5]
## [1,] "0"  "1/2"  "-1" "0"  "0"
## [2,] "0"  "-1/2" "1"  "0"  "0"
## [3,] "0"  "1"    "-1" "0"  "0"
## [4,] "0"  "0"    "1"  "0"  "0"
## attr(,"representation")
## [1] "H"
```

```
h_rep_non_redundant = redundant(h_rep)

h_rep_non_redundant$output
```

```
##      [,1] [,2]  [,3] [,4] [,5]
## [1,] "1"  "1/2" "-1" "0"  "0"
## attr(,"representation")
## [1] "H"
```

Case 2: Impossible equalities

```
a1 =
  rbind(c( "1" , "0",  "0"),
        c("-1", "0",  "0" ),
        c ("1",  "0",  "0" ),
        c ("-1" ,"0" , "0" ))

b1 = c("1/2", "-6/10", "1" ,  "0")

h_rep = makeH(a1,b1)


h_rep
```

```
##      [,1] [,2]    [,3] [,4] [,5]
## [1,] "0"  "1/2"   "-1" "0"  "0"
## [2,] "0"  "-6/10" "1"  "0"  "0"
## [3,] "0"  "1"     "-1" "0"  "0"
## [4,] "0"  "0"     "1"  "0"  "0"
## attr(,"representation")
## [1] "H"
```

```
h_rep_non_redundant = redundant(h_rep)

h_rep_non_redundant$output
```

```
##      [,1] [,2]   [,3] [,4] [,5]
## [1,] "1"  "1/2"  "-1" "0"  "0"
## [2,] "1"  "-3/5" "1"  "0"  "0"
## attr(,"representation")
## [1] "H"
```