Pivoting about

# Permuting

## Testing unpaired permuting of SELECT format data, no blocking (by Day)

## Testing within-block unpaired permuting of SELECT format data

df=DF2  
#DF2  
n.hauls=length(unique(df$Haul))  
haulgrp= df |> group\_by(Day,Haul) |>   
 summarize (grp=unique(Gear), .groups = "drop\_last")   
#haulgrp  
permgrp= haulgrp |> slice\_sample(n=nhauls)  
#permgrp  
permuted.hauls=haulgrp$Haul[haulgrp$grp!=permgrp$grp]  
permuted.obs=(df$Haul %in% permuted.hauls)  
  
df[permuted.obs,col.names]=df[permuted.obs,rev(col.names)]  
df$Permuted=permuted.obs  
df

## Gear Haul lgth n1 n2 q1 q2 Day Permuted  
## 1 T0 One 1 3 0 0.5 1 B FALSE  
## 2 T0 One 2 6 0 0.5 1 B FALSE  
## 3 T0 One 3 1 0 0.5 1 B FALSE  
## 4 T45 Two 1 0 4 0.5 1 B FALSE  
## 5 T45 Two 2 0 5 0.5 1 B FALSE  
## 6 T0 Three 1 2 0 1.0 1 B FALSE  
## 7 T0 Three 2 1 0 1.0 1 B FALSE  
## 8 T45 Four 1 4 0 0.6 1 B TRUE  
## 9 T45 Four 2 5 0 0.6 1 B TRUE  
## 10 T45 Four 3 6 0 0.6 1 B TRUE  
## 11 T0 Five 1 0 1 0.6 1 B TRUE  
## 12 T0 Five 2 0 6 0.6 1 B TRUE  
## 13 T0 OneA 1 0 13 0.5 1 A TRUE  
## 14 T0 OneA 2 0 16 0.5 1 A TRUE  
## 15 T0 OneA 3 0 11 0.5 1 A TRUE  
## 16 T45 TwoA 1 4 10 0.5 1 A TRUE  
## 17 T45 TwoA 2 5 10 0.5 1 A TRUE  
## 18 T0 ThreeA 1 12 0 1.0 1 A FALSE  
## 19 T0 ThreeA 2 11 0 1.0 1 A FALSE  
## 20 T45 FourA 1 4 10 0.6 1 A TRUE  
## 21 T45 FourA 2 5 10 0.6 1 A TRUE  
## 22 T45 FourA 3 6 10 0.6 1 A TRUE  
## 23 T0 FiveA 1 0 11 0.6 1 A TRUE  
## 24 T0 FiveA 2 0 16 0.6 1 A TRUE

# ***Paired permuting of SELECT format data***

#==============SELECT\_FORMAT test======================================== #Playing with pivot\_wider. Could be a better version of SELECT\_FORMAT #DF=Df #[,c(“TowID”,“Species”,“SF”,“Gear”,“n”,“lgth”)]