

Functions, continued

Writing functions to reduce copy and paste

If you find yourself doing something over and over, you can probably write a function for it.

One example is the regression tables we created yesterday.

Let's imagine we are fitting multiple similar models

```
1 logistic_model <- glm(glasses ~ eyesight_cat + sex_cat + income_cat,
2   data = nlsy, family = binomial())
3 )
4 poisson_model <- glm(nsibs ~ eyesight_cat + sex_cat + income_cat,
5   data = nlsy, family = poisson())
6 )
7 logbinomial_model <- glm(glasses ~ eyesight_cat + sex_cat + income_cat,
8   data = nlsy, family = binomial(link = "log"))
9 )
```

We have a model for a table we want to create

```
1 tbl_regression(  
2   poisson_model,  
3   exponentiate = TRUE,  
4   label = list(  
5     sex_cat ~ "Sex",  
6     eyesight_cat ~ "Eyesight",  
7     income ~ "Income"  
8   )  
9 )
```

Even though this is already a function, we can *wrap* it in a new function!

New table function

We can refer generically to `model` and then put the model we want a table for as an argument

```
1 new_table_function <- function(model) {  
2   tbl_regression(  
3     model,  
4     exponentiate = TRUE,  
5     label = list(  
6       sex_cat ~ "Sex",  
7       eyesight_cat ~ "Eyesight",  
8       income ~ "Income"  
9     )  
10  )  
11 }
```

Exercise

- Copy and paste this function into your script
- Create each of the models and run
- Try to figure out how you could allow someone to pass the `tidy_fun` argument (from the regression exercises yesterday)