Analysis

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```
## Warning: One or more parsing issues, call `problems()` on your data frame for details,
## e.g.:
##   dat <- vroom(...)
##   problems(dat)
```

```
## Warning: There was 1 warning in `mutate()`.
## i In argument: `date = ym(...1)`.
## Caused by warning:
## !  194 failed to parse.
```

```
## Warning: One or more parsing issues, call `problems()` on your data frame for details,
## e.g.:
##   dat <- vroom(...)
##   problems(dat)
```

```
## Warning: There was 1 warning in `mutate()`.
## i In argument: `date = ym(...1)`.
## Caused by warning:
## !  87 failed to parse.
```

Question 1

In this question, I will replicate the mean return patterns for the Fama-French 25. These are the portfolios formed on size, and book-to-market value weighted. The values table 1 come from running the regression given in equation 1 below.

$$R_i - R_f = a_i + b_i(R_M - R_f) + s_i SMB + h_i HML + e_i \tag{1}$$

Table 1:

Mean Return (% Per Month)					
	Low	2	3	4	High
a					
Small	-0.5013	-0.0200	-0.0413	0.1316	0.1731
2	-0.2097	0.0127	0.0511	0.0588	0.0042
3	-0.1109	0.0707	-0.0142	0.0521	0.0308
4	0.0792	-0.0506	-0.0293	0.0441	-0.0783
Big	0.1748	0.0075	-0.0045	-0.2236	-0.1844
b					
Small	1.0964	0.9598	0.9290	0.8883	0.9417
2	1.1288	1.0144	0.9741	0.9540	1.0820
3	1.1042	1.0235	0.9817	1.0026	1.0882
4	1.0695	1.0609	1.0369	1.0302	1.1352
Big	0.9875	0.9706	0.9451	1.0222	1.1286
s					
Small	1.4084	1.3274	1.0985	1.0813	1.1083
2	1.0233	0.9140	0.7567	0.7234	0.8893
3	0.7503	0.5897	0.4330	0.4301	0.5766
4	0.3988	0.2223	0.1663	0.2307	0.3031
Big	-0.2371	-0.1901	-0.2243	-0.2090	-0.1380
h					
Small	-0.2597	0.0112	0.2889	0.4764	0.6958
2	-0.3388	0.1084	0.3659	0.5605	0.7986
3	-0.3767	0.1381	0.4083	0.6125	0.8392
4	-0.3795	0.1829	0.4224	0.5634	0.8322
Big	-0.3521	0.0716	0.2920	0.6666	0.8558