

# Project 4a-Trading Log

*Peyton Taylor*

*4/6/2018*

## Part 3

```

my_trading_log<-function(arg1 = f2_output$Date, arg2 = f2_output$Tickers ,arg3= f2_output$Alphas)

{
require(quantmod)
require(openxlsx)

transaction_type<-rep("Hold", length(arg2))
transaction_amount<-rep(NA, length(arg2))

my_dates<-seq(from= as.Date(arg1),length= 2,by="1 months")[2]

for (ticker in 1:length(arg2))
{
  ticker_date<-getSymbols(arg2[ticker], src="yahoo", auto.assign = FALSE, from = arg1, to = my_dates)
  i_price<-as.numeric(ticker_date[1,grep("Open", names(ticker_date))])

  if(arg3[ticker]>0.00000001)
  {
    transaction_type[ticker]<-"Buy"
    transaction_amount[ticker]<-floor(10000/i_price)
  }

  else if (arg3[ticker]<(-0.00000001))
  {
    transaction_type[ticker]<-"Sell"
    transaction_amount[ticker]<-0
  }
}

transaction_df<-data.frame(Date = rep(arg1, length(arg2)), ticker = arg2, transaction_type = transaction_type,
                           transaction_amount = transaction_amount,
                           stringsAsFactors = FALSE)

write.table(transaction_df, file = "transaction_log.csv", sep = ",")
return(transaction_df)
}
my_trading_log()

```

```
## Loading required package: openxlsx
```

##		Date	ticker	transaction_type	transaction_amount
## 1		2018-01-02	DJI	Hold	NA
## 2		2018-01-02	MMM	Buy	42
## 3		2018-01-02	AXP	Sell	0
## 4		2018-01-02	AAPL	Buy	58
## 5		2018-01-02	BA	Buy	33
## 6		2018-01-02	CAT	Buy	63
## 7		2018-01-02	CVX	Sell	0
## 8		2018-01-02	CSCO	Buy	258
## 9		2018-01-02	KO	Sell	0
## 10		2018-01-02	DWDP	Buy	139
## 11		2018-01-02	XOM	Sell	0
## 12		2018-01-02	GE	Sell	0
## 13		2018-01-02	GS	Sell	0
## 14		2018-01-02	HD	Buy	52
## 15		2018-01-02	IBM	Sell	0
## 16		2018-01-02	INTC	Buy	215
## 17		2018-01-02	JNJ	Buy	71
## 18		2018-01-02	JPM	Buy	92
## 19		2018-01-02	MCD	Buy	57
## 20		2018-01-02	MRK	Sell	0
## 21		2018-01-02	MSFT	Buy	116
## 22		2018-01-02	NKE	Buy	159
## 23		2018-01-02	PFE	Sell	0
## 24		2018-01-02	PG	Sell	0
## 25		2018-01-02	TRV	Sell	0
## 26		2018-01-02	UNH	Buy	45
## 27		2018-01-02	UTX	Sell	0
## 28		2018-01-02	VZ	Sell	0
## 29		2018-01-02	V	Buy	87
## 30		2018-01-02	WMT	Buy	100
## 31		2018-01-02	DIS	Sell	0