

Random_Walk

Code

```
x <- c(0)
y <- c(0)
for( i in c(1:100)){
  d <- runif(1)
  s <- round(runif(1))
  if( d <= 0.5 ) {
    x <- c( x, x[i]+(-1)^s )
    y <- c( y, y[i] )
  }
  else {
    x <- c( x, x[i] )
    y <- c( y, y[i]+(-1)^s )
  }
}
```

Data

```
str(x)
```

```
##  num [1:101] 0 0 1 0 0 0 1 0 0 0 ...
```

```
str(y)
```

```
##  num [1:101] 0 -1 -1 -1 0 -1 -1 -1 -2 -3 ...
```

Plots

Random walk result :

