

```

> start_time <- Sys.time()
>
> totalCount=1000000
> totalCountDecrementer=1000000
> primeCount=0
>
> while (totalCountDecrementer!=0) {
+
+   x=sample(1:1000000,1)
+   y=sample(1:1000000,1)
+
+   smaller=min(x,y)
+
+   prime=TRUE
+
+   for(i in 2:sqrt(smaller)){
+     if(x%%i==0 & y%%i==0) {
+       prime=FALSE
+       break
+     }
+   }
+   #print(x)
+   #print(y)
+   if(prime)
+   {
+     #print("Numbers are prime to each other")
+     primeCount=primeCount+1
+   }
+   #else {
+     #print("Numbers are not prime to each other")
+   #}
+   totalCountDecrementer=totalCountDecrementer-1
+   #print(totalCountDecrementer)
+ }
> print(paste("Probability that 2 numbers are prime to each other is: ",prime
Count/totalCount))
[1] "Probability that 2 numbers are prime to each other is:  0.607566"
> end_time <- Sys.time()
> print(start_time)
[1] "2018-09-17 23:57:15 BST"
> print(end_time)
[1] "2018-09-18 00:07:28 BST"
> print(end_time - start_time)
Time difference of 10.21555 mins

```