|  |  |
| --- | --- |
|  | set.seed(42) |
|  |  |
|  | #create matrix |
|  | mat\_1<- replicate(10,rnorm(10)) |
|  |  |
|  | #transform into data frame |
|  | df\_1= data.frame(mat\_1) |
|  | df\_1<- df\_1 + 10\*sin(0.75\*pi) |
|  |  |
|  | #non-vectorized form |
|  | set.seed(42) |
|  | #create matrix |
|  | mat\_1<- replicate(10,rnorm(10)) |
|  | #transform into data frame |
|  | df\_1= data.frame(mat\_1) |
|  |  |
|  | for(i in 1:10){ |
|  | for(j in 1:10){ |
|  | df\_1[i,j]<- df\_1[i,j] + 10\*sin(0.75\*pi) |
|  | print(df\_1) |
|  | } |
|  | } |
|  |  |
|  | #time difference |
|  |  |
|  | system.time( |
|  | df\_1[i,j]<- df\_1[i,j] + 10\*sin(0.75\*pi) |
|  | ) |
|  |  |
|  | system.time( |
|  | for(i in 1:10){ |
|  | for(j in 1:10){ |
|  | df\_1[i,j]<- df\_1[i,j] + 10\*sin(0.75\*pi) |
|  | } |
|  | } |
|  | ) |