

Q.1 Write a function to print Fibonacci series.

Q2. Write the sql command to answer the following questions in r

a.Display the rows when the variables time is 7.

b.find the Row Values when the column hp contains values 93 in mtcars dataset.

c. Count the different gear values in mtcars dataset.

Ans:

Fibonacci series is the series where we add two previous number of the present number if there addition is same as the present data then it is in Fibonacci series.

```
> fibbo=function(n)
+ {
+ x<-c(0,1)
+ while (length(x)<n)
+ {
+ pos<-length(x)
+ new<-x[pos]+x[pos-1]
+ x<-c(x,new)
+ }
+ return(x)
+ }
> fibbo
function(n)
{
x<-c(0,1)
while (length(x)<n)
{
pos<-length(x)
new<-x[pos]+x[pos-1]
x<-c(x,new)
}
return(x)
}
> fibbo(5)
[1] 0 1 1 2 3
```

Ans2.

- a. The output of time =7  
Of Bod dataset

```
> sqldf('select * from BOD where "Time"==7')
  Time demand
1     7   19.8
```

- B. output of Column = hp ( condition) = values 93 in mtcars

```
> sqldf('select * from mtcars where "hp"==93')
  mpg cyl disp hp drat  wt  qsec vs am gear carb
1 22.8   4  108 93 3.85 2.32 18.61  1  1    4    1
```

- C. what are the different gears in the dataset output of that.

```
> sqldf('select count(DISTINCT(gear)) from mtcars')
count(DISTINCT(gear))
1                      3
```