

STAT 542 / CS 598: Example Homework

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Due: Yesterday

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Question 1 [70 Points] Tuning Random Forests in Virtual Twins

Randomly split the data into 75% for training and 25% for testing.

Answer:

```
health_data= read.csv("data/sepsis.csv")
```

Question 2 (50 Points) Write R Functions

Write an R function that outputs the first n terms in the Fibonacci sequence, where n is the only input value of the function.

Answer:

```
# construct the function
fibonacci <- function(n)
{
  x = numeric(n)
  x[1:2] = c(1,1)
  for(i in 3:n) x[i] = x[i-1] + x[i-2]
  return(x)
}

# test the function
fibonacci(10)
```

```
## [1] 1 1 2 3 5 8 13 21 34 55
```