Software Tools, R - Homework3

Due date : 01 Dec 2019, 23:00

Objectives

- Function
- Condition Statments
- Loops

Questions

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1 - A dependent function chain is defined as $h(x) = \frac{log(x)-1}{\sqrt{x}}$, $g(x) = e^{\sqrt{h(x)}}$ and $f(x) = sing(x)^{cosg(x)}$. Create a function and solve $f(x)$ for each x <- 4:250. Print and plot $f(x)$.

```
exeedence <- function() {
x <- 4:250
# Fill here
plot(fx)
}
```

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2 - Create a function that calculates number of exceedence of a specified threshold in an random x vector. If the number of exceedence is higher than threshold than print a sentence, else print another sentence for warning.

```
exeedence <- function(n, min, max, threshold) {
# Fill here
# You can use runif() function
}
```

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3 - Create a function calculates the sum of digits of any integer. For instance, sum of digits of 385102 is 3 + 8 + 5 + 1 + 2 = 19. While sum is lower than 50, then add 10 to sum and print a warning sentence.

```r
sumofdig <- function(x) {
# Fill here
# You can use strsplit() function
}
```

For questions or problems, please use Ninova

I inspired from Ismail SEZEN
