Assignment 3

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Reaction times were recorded for 13 individuals under the influence of either drug A or drug B, giving the following data: Drug A: 2.07 1.71 2.24 1.62 2.11 Drug B: 2.41 1.96 1.93 2.71 2.50 2.84 2.88 2.43

a)

Use R to carry out a Mann-Whitney U-test on these data.

```
drug.a <- c(2.07, 1.71, 2.24, 1.62, 2.11)
drug.b <- c(2.41, 1.96, 1.93, 2.71, 2.50, 2.84, 2.88, 2.43)
```

b)

Use R to carry out a two-sample randomisation test, based on sample means, to assess whether the effects of the two drugs differ, and state your conclusions.

```
print(1)
```

```
## [1] 1
```

c)

Will the *p-value* calculated in part (b) differ to one calculated by enumerating all permutations at least as extreme as the observed one? Explain your answer.

```
print(1)
```

```
## [1] 1
```