Teste-t (NHT)

R=10000

p=numeric(R)

for(i in 1:R){

amostra1=sample(x1,size=N, replace=T)

amostra2=sample(x2,size=N,replace=T)

p[i]=t.test(amostra1,amostra2,var.equal=TRUE)$p.value

}

Teste-t(IT)

R=10000

media=numeric(R)

RSSn=numeric(R)

RSSa=numeric(R)

aiccn=numeric(R)

aicca=numeric(R)

Delta\_aicc=numeric(R)

for(i in 1:R){

amostra1=sample(x1,size=N,replace=T)

amostra2=sample(x2,size=N,replace=T)

media[i]=((mean(amostra1)+mean(amostra2))/2)

RSSn[i]=sum((amostra1-media[i])^2)+sum((amostra2-media[i])^2)

RSSa[i]=sum((amostra1-(mean(amostra1)))^2)+sum((amostra2-(mean(amostra2)))^2)

aiccn[i]=N\*log(RSSn[i]/N)+4+(12/(N-3))

aicca[i]=N\*log(RSSa[i]/N)+6+(24/(N-4))

Delta\_aicc[i]=aiccn[i]-aicca[i]

}

ANOVA (IT)

R=10000

media1=numeric(R)

media2=numeric(R)

media3=numeric(R)

media1.2=numeric(R)

media1.3=numeric(R)

media2.3=numeric(R)

media1.2.3=numeric(R)

RSSn=numeric(R)

RSS12.3=numeric(R)

RSS1.23=numeric(R)

RSS13.2=numeric(R)

RSS1.2.3=numeric(R)

aiccn=numeric(R)

aicc12.3=numeric(R)

aicc1.23=numeric(R)

aicc13.2=numeric(R)

aicc1.2.3=numeric(R)

for(i in 1:R){

amostra1=sample(x1,size=N,replace=T)

amostra2=sample(x2,size=N,replace=T)

amostra3=sample(x3,size=N,replace=T)

media1[i]=mean(amostra1)

media2[i]=mean(amostra2)

media3[i]=mean(amostra3)

media1.2[i]=(mean(amostra1)+mean(amostra2))/2

media1.3[i]=(mean(amostra1)+mean(amostra3))/2

media2.3[i]=(mean(amostra2)+mean(amostra3))/2

media1.2.3[i]=(mean(amostra1)+mean(amostra2)+mean(amostra3))/3

RSSn[i]=sum((amostra1-media1.2.3[i])^2,(amostra2-media1.2.3[i])^2,(amostra3-media1.2.3[i])^2)

RSS12.3[i]=sum((amostra1-media1.2[i])^2,(amostra2-media1.2[i])^2,(amostra3-media3[i])^2)

RSS1.23[i]=sum((amostra1-media1[i])^2,(amostra2-media2.3[i])^2,(amostra3-media2.3[i])^2)

RSS13.2[i]=sum((amostra1-media1.3[i])^2,(amostra2-media2[i])^2,(amostra3-media1.3[i])^2)

RSS1.2.3[i]=sum((amostra1-media1[i])^2,(amostra2-media2[i])^2,(amostra3-media3[i])^2)

aiccn[i]=N\*log(RSSn[i]/N)+4+(12/(N-3))

aicc12.3[i]=N\*log(RSS12.3[i]/N)+6+(24/(N-4))

aicc1.23[i]=N\*log(RSS1.23[i]/N)+6+(24/(N-4))

aicc13.2[i]=N\*log(RSS13.2[i]/N)+6+(24/(N-4))

aicc1.2.3[i]=N\*log(RSS1.2.3[i]/N)+8+(40/(N-5))

}

ANOVA(NHT)

R=10000

SSb=numeric(R)

SSw=numeric(R)

dfw=numeric(R)

MSb=numeric(R)

MSw=numeric(R)

F=numeric(R)

for(i in 1:R){

amostra1=sample(x1,size=N,replace=T)

amostra2=sample(x2,size=N,replace=T)

amostra3=sample(x3,size=N,replace=T)

SSb[i]=(((sum(amostra1)^2)/N)+((sum(amostra2)^2)/N)+((sum(amostra3)^2)/N))-((sum(amostra1,amostra2,amostra3)^2)/(3\*N))

SSw[i]=sum((amostra1-mean(amostra1))^2,(amostra2-mean(amostra2))^2,(amostra3-mean(amostra3))^2)

dfw[i]=(3\*N)-3

MSb[i]=SSb[i]/2

MSw[i]=SSw[i]/dfw[i]

F[i]=MSb[i]/MSw[i]

}

Tukey

R=10000

media1=numeric(R)

media2=numeric(R)

media3=numeric(R)

RSS=numeric(R)

MS=numeric(R)

Q12=numeric(R)

Q13=numeric(R)

Q23=numeric(R)

df=numeric(R)

for(i in 1:R){

amostra1=sample(x1,size=N,replace=T)

amostra2=sample(x2,size=N,replace=T)

amostra3=sample(x3,size=N,replace=T)

media1[i]=mean(amostra1)

media2[i]=mean(amostra2)

media3[i]=mean(amostra3)

RSS[i]=sum((amostra1-media1[i])^2,(amostra2-media2[i])^2,(amostra3-media3[i])^2)

df[i]=(3\*N)-3

MS[i]=RSS[i]/df[i]

Q12[i]=(media1[i]-media2[i])/sqrt(MS[i]/N)

Q13[i]=(media1[i]-media3[i])/sqrt(MS[i]/N)

Q23[i]=(media2[i]-media3[i])/sqrt(MS[i]/N)

}

Correlação (NHT)

R=10000

p=numeric(R)

for(i in 1:R){

n=sample(1:10000,size=N,replace=F)

amostra1=x[n]

amostra2=y[n]

p[i]=cor.test(amostra1,amostra2)$p.value

}

Correlação (IT)

R=10000

delta\_aicc=numeric(R)

for(i in 1:R){

n=sample(1:10000,size=N,replace=F)

amostra1=x[n]

amostra2=y[n]

modn<-lm(amostra1~1)

moda<-lm(amostra1~amostra2)

delta\_aicc[i]<-AICc(modn)-AICc(moda)

}

GLM (NHT)

R=10000

N=N

py\_x1=numeric(R)

py\_x2=numeric(R)

for(i in 1:R){

n=sample(1:10000,size=N,replace=F)

amostray=y[n]

amostrax1=x1[n]

amostrax2=x2[n]

py\_x1[i]=summary(glm(amostray~amostrax1+amostrax2))$coef[2,"Pr(>|t|)"]

py\_x2[i]=summary(glm(amostray~amostrax1+amostrax2))$coef[3,"Pr(>|t|)"]

}

R=10000

N=N

AICc\_modn=numeric(R)

AICc\_moda1=numeric(R)

AICc\_moda2=numeric(R)

AICc\_moda3=numeric(R)

for(i in 1:R){

n=sample(1:10000,size=N,replace=F)

amostray=y[n]

amostrax1=x1[n]

amostrax2=x2[n]

modn<-glm(amostray~1)

moda1<-glm(amostray~amostrax1)

moda2<-glm(amostray~amostrax2)

moda3<-glm(amostray~amostrax1+amostrax2)

AICc\_modn[i]=AICc(modn)

AICc\_moda1[i]=AICc(moda1)

AICc\_moda2[i]=AICc(moda2)

AICc\_moda3[i]=AICc(moda3)

}