**Question 1**

c = 0

r = 1

for x=[1:size(TEM, 1)]

c = c + 1

if (c <= 30) then

MAT(z, c) = TEM(x);

else

c = 0;

r = r + 1;

end

end

**Question 2**

Matrice center reduit

moy = mean(MAT, "r")

ecr = stdev(MAT, "r")

for x = [1:size(MAT, 1)]

for y = [1:size(MAT, 2)]

MATC(x,y) = (MAT(x, y) - moy(y)) / ecr(y);

end

end

matrice transpose

MATT = MATC'

for x = [1:size(MATC, 2)]

for y = [1:size(MATT, 1)]

COR30(x,y) = correl(MATC(:,x), MATT(y,:))

end

end

**Question 3**

La clone 8 et 19

**Question 4**

Plot(MAT(:, 8), “b”)

PLOT(MAT(:, 19), “r”)

**Question 5**

j1 = COR30(:,8)

j2 = COR30(:, 19)

meanj1 = mean(j1)

meanj2 = mean(j2)

for x= [1:size(j1, 1)]

sigma1 = j1(x) - meanj1;

sigma2 = j2(x) - meanj2;

sigmaall = (j1(x) - meanj1) \* (j2(x) - meanj2);

end

b = sigmaall / (sigma1 \* sigma1)

a = meanj2 - (b \* meanj1)