```
import math
def correlationCoefficient(X, Y, n) :
 sum_X =0
sum_Y =0
sum_XY = 0
squareSum_X = 0
 squareSum_Y = 0
i = 0
while i < n :
sum_X = sum_X + X[i]
sum_Y = sum_Y + Y[i]
sum_XY = sum_XY + X[i] * Y[i]
squareSum_X = squareSum_X + X[i] * X[i]
squareSum_Y = squareSum_Y + Y[i] * Y[i]
  i = i + 1
corr = (float)(n * sum_XY - sum_X * sum_Y)/
(float)(math.sqrt((n * squareSum_Xsum_Xsum_X)* (n *
squareSum_Y -  sum_Y * sum_Y)))
  return corr
X = [15, 18, 21, 24, 27]
Y = [25, 25, 27, 31, 32]
```

```
n = len(X)
print ('{0:.6f}'.format(correlationCoefficient(X, Y, n)))
```