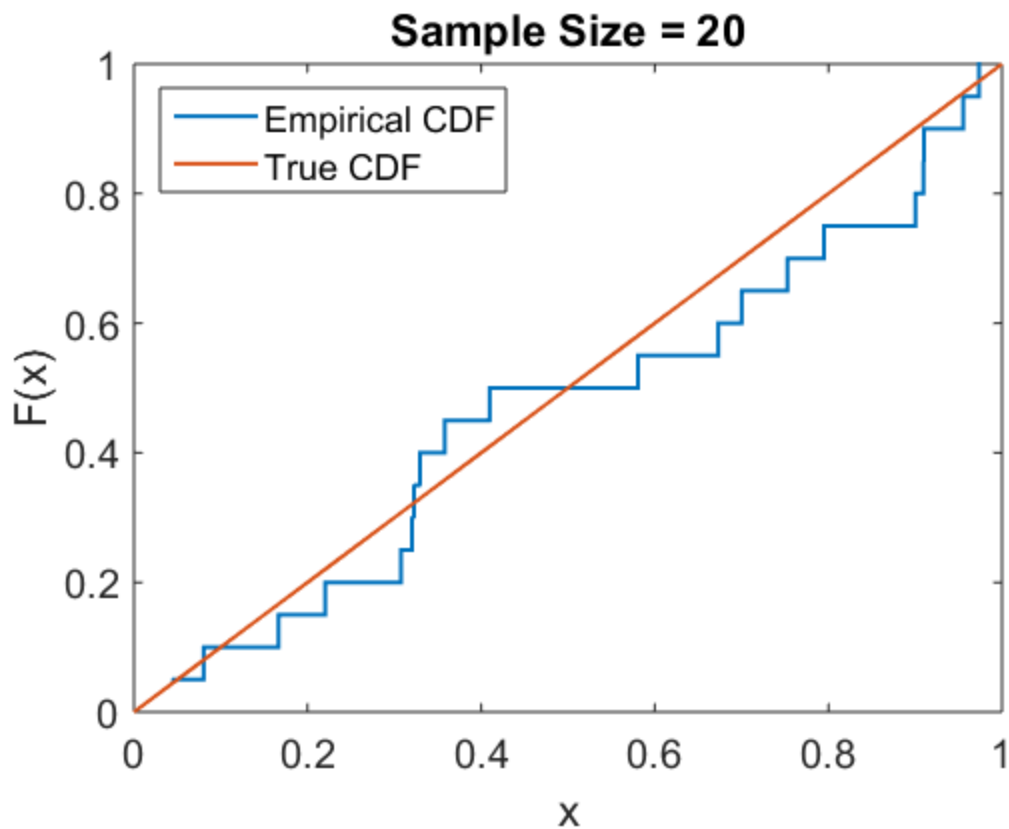


```

% Exercise 3
% part (a.)
N = 20; % set sample size
x = rand(N,1);
edges = sort(x);
emp_cdf = cumsum(histc(x,edges))/length(x);
% emp_cdf = 1/N:1/N:1; will work fine too
% plot the empirical cdf
stairs(edges,emp_cdf,'LineWidth',1.5)
hold on;
% plot the true cdf, i.e. f(x) = x for x in [0,1]
plot(0:0.01:1,0:0.01:1,'LineWidth',1.5)
legend('Empirical CDF','True CDF','Location','northwest')
xlabel('x')
ylabel('F(x)')
text(['Sample Size = ',num2str(N)]);
title(text);
set(gca,'FontSize',15)

```



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