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```
function [] = PS4_stats_script_hkolagan_asartor(vec1, vec2)

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% ENGR 132
% Program Description
%   Displays mean and standard deviation for 2 inputed vectors
%
% Functvion Call
%   PS04_stats_io_hkolagan_asartor(vec1, vec2)

% Input Arguments
%   1. vec1
%   2. vec2

% Output Arguments
%   none

% Assignment Information
%   Assignment:         PS 04, Problem 2
%   Author:              Harith Kolaganti, hkolagan@purdue.edu
%   Team ID:             005-12
%   Paired Programmer:  Andrew Sartorio, asartor@purdue.edu
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

INITIALIZATION

STATISTICS CALCULATIONS

```
meanvec1 = mean(vec1);
stdvec1 = std(vec1);

meanvec2 = mean(vec2);
stdvec2 = std(vec2);

Not enough input arguments.

Error in PS04_stats_io_hkolagan_asartor (line 30)
meanvec1 = mean(vec1);
```

FORMATTED TEXT DISPLAY

8. Copy relevant sections from your script into the UDF. Fix them as necessary to make them work within the UDF.

```
fprintf('The mean of vector 1 is %.2f\n', meanvec1)
fprintf('The standard deviation of vector 1 is %.2f\n', stdvec1)
fprintf('The mean of vector 2 is %.2f\n', meanvec2)
fprintf('The standard deviation of vector 2 is %.2f\n', stdvec2)
```

COMMAND WINDOW OUTPUT

Paste as comments the two function calls and the displayed text to the COMMAND WINDOW OUTPUTS section of the code.

```
% PS04_stats_io_hkolagan_asartor(vec1, vec2)
% The mean of vector 1 is 8.82
% The standard deviation of vector 1 is 0.04
% The mean of vector 2 is 13.90
% The standard deviation of vector 2 is 0.40
```

ANALYSIS

Q1

Between the script and the stat_nino UDF, there are virtually no differences. They both produce the same results in the command window.

Q2

When the stats_io function is called on, the results are different than that of stats_nino because it only displays the mean and standard deviation of vector 1's integers.

Q2

The program description and function call is displayed in the command window. This is very helpful because if the UDF is very long, this line would help one realize what the purpose of the function they are working on is and also help one see how to call on it for it to run as well.

ACADEMIC INTEGRITY STATEMENT

I/We have not used source code obtained from any other unauthorized source, either modified or unmodified. Neither have I/we provided access to my/our code to another. The project I/we am/are submitting is my/our own original work.

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