Chapter 5- part 2 (40 points) ………………………………………………………………………… Due on Friday 10/9/15

Note: Before you submit your script in the drop box, print out the program and the output for each of the following :

Q1 – What are the outputs of the following programs:

1. y =2 ;x=1

while (x < 5)

fprintf('%2.1f %2.1f\n', x, y);

y =y\*2;

x=x+1;

end

1. for i = 1:4

for j = 1:i

fprintf('%d %d\n',i ,j);

end

fprintf('\*\*\*\*\*\*\*\n ')

end

1. for i = 1:4

for j = 1:2\*i

fprintf('%d %d\n',i ,j);

end

fprintf('\*\*\*\*\*\*\*\n ')

end

1. limit = 0.8; s = 0; k=0

while 1

tmp = rand;

if tmp > limit

break

end

k=k+1;

s= s + tmp;

fprintf('%d %d %d\n',tmp,s,k);

end

Q2 – Write a program to input two string s1 and s2 and list them as [s1 s2] or [s2 s1] according to their alphabetically order.

s1= input(‘input the first string’, ‘s’)

s2= input(‘input the first string’, ‘s’)

L\_s1=length(s1);

L\_s2=length(s2)

Flag =0

% calculate n for the loop to check each character in a string

% for loop to checks the characters

% check you flag and decide if s1 is greater than s2

Q3- Use any loop statement (for or while) to find whether an input number is a prime number or not.

Q4- Write a program to input two angles (**** . Use switch ..case to find the following the addition and the difference for both cos and sin functions according to these formula:

|  |
| --- |
| **cos(+) = cos  cos  + sin  sin ** |
| **sin ( + ) = sin  cos  + sin  cos ** |