COMSATS UNIVERSITY ISLAMABAD
ATTOCK CAMPUS

Lab Report 8 : Operating System

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Rubrics Assessment Sheet for Operating System	
Lab #:	**Lab no 8**
Lab Title:	**Priority Scheduling Algorithms**
Submitted by:	
Names **Muaaz Shoaib** **Shahzeb Shaheen**	**Registration** **FA20-BCS-074** **FA20-BCS-040**

Rubrics name & number		Marks	
		ln-Lab	Post lab
Engineering Knowledge	*R2:* Use of Engineering Knowledge and follow Experiment Procedures: *Ability to follow experimental procedure,control variables,and record Procedural steps on lab report.*		
Problem Analysis	*R6: Experimental Data Analysis :* *Ability to interept findings,compare them to values in the literature,identify weaknesses and limitations*		
Design	*RS: Best Coding Staudards:* *Ability lo follow the* coding standards and programming practices		
Modem Tools Usage	*R9: Undcrsta11d Tools: Ability to describe and explain the principles behind applicability of engineering tools*.		
Individual and Teamwork	*R9:Management of Team Work:* *Ability to appreciate, understand and work multidisciplinary team members*		

Rubrics #	R2	R6	RS	R9	Rl3
Jn -Lab					
Post- Lab					

Q : Write a matlab Program to simulate rate-monotic based static priority scheduling algorithm.

Code :

```
clc;
clear all;
close all;
n=input('Enter Number of Processes:');
sum=0;
for i=1:n
   burst(i)=input('Enter Burst time:');
period(i)=input('Enter Period:');
end
for i=1:n
sum=sum+(burst(i)/period(i));
end
if (sum>1)
disp('The Processes are not Schedulable!')
else
disp('The Processes are Schedulable!')
end
stack=0;flag=0;[M I]=min(period(:));
for i=1:n
for j=i+1:n
if(period(i)>period(j))
temp=period(i);
period(i)=period(j);
period(j)=temp;temp1=burst(i);
burst(i)=burst(j);
```

```
burst(j)=temp1;
end
end
end
period2=period;
b_t2=burst;
ct=period;
new=period-period;
for k=1:n
for i=1:n
for j=1:n
if (period2(j)==min(period2(:)))
stack=stack+b_t2(j);
if (stack>period2(j))
flag=1;
disp('Deadline missed!')
fprintf('P%d\n missed the deadline :(',j)
break
end
period2(j)=period2(j)+ct(j);
new(j)=new(j)+ct(j);
if(flag==1)
break
end
end
end
if(stack<min(new(:)))
z=min(new(:))-stack;
stack=stack+z;
end
if(flag==1)
```

```
break
end
end
if(flag==1)
break
end
end
```

Output :