

EDF Project

Hyperperiod :

Hyperperiod = 100 ms.

CPU Load :

Ext1 = 3 μ s ,Ext2= 3 μ s ,Ext3 = 45 μ s ,Ext4 = 5 μ s ,Ext5= 5ms,Ext6 = 12 μ s.

$U = 3 (\mu\text{s}) + 3 (\mu\text{s}) + 45 (\mu\text{s}) + 5(\mu\text{s}) + 5(\text{ms}) + 12(\text{ms}) = 0.62056 \rightarrow 62.056\%$

Checking System schedulability :

Using URM : $U = (1.5(\mu\text{s}) / 50) + (1.5(\mu\text{s}) / 50) + (1(\mu\text{s}) / 100) + (45(\mu\text{s}) / 20) + (5(\text{ms}) / 10) + (12(\text{ms}) / 100)$
=0.62232 ms

$URM = 6 * (2^{(1/6)} - 1) = 0.73477$

Since the URM is greater than the U then the system is schedulable .



