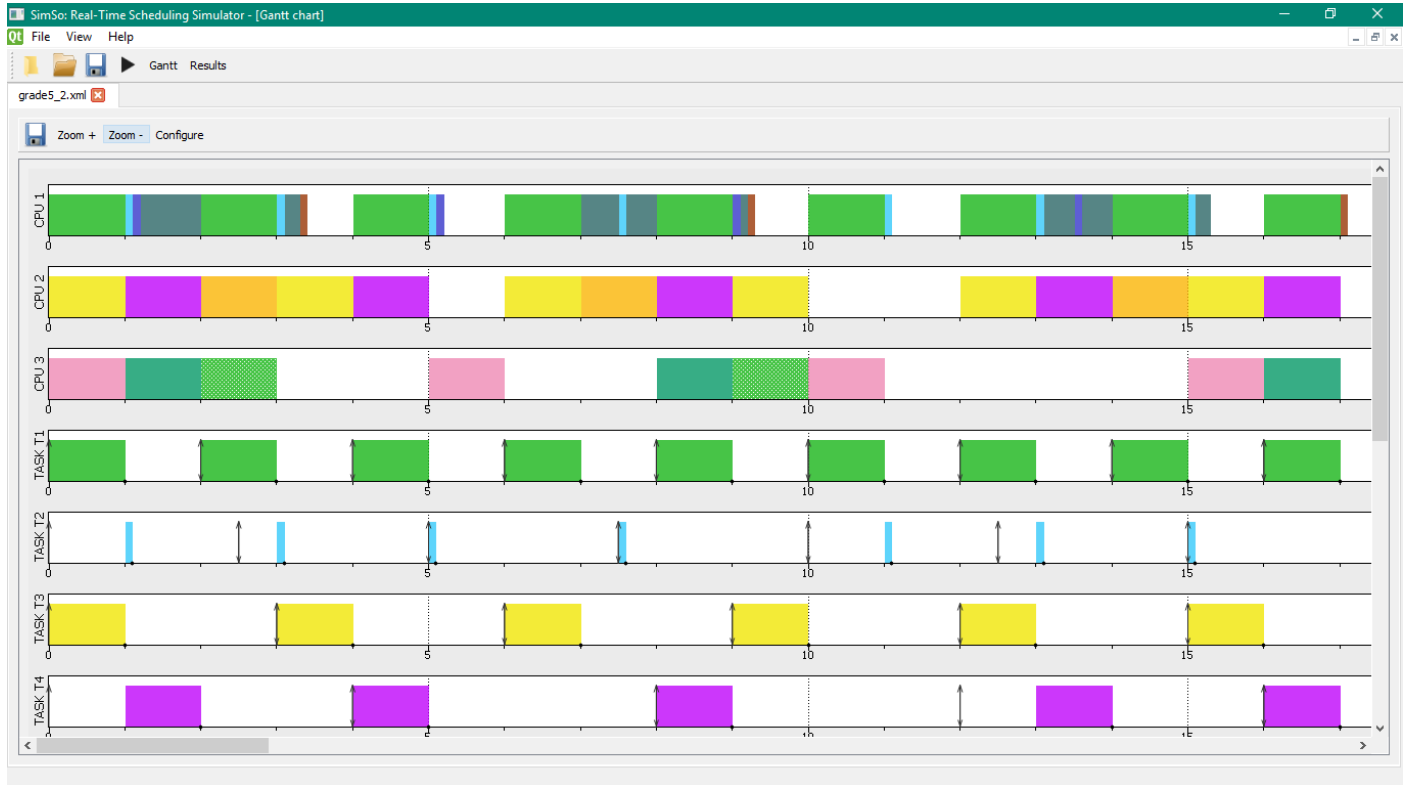


Assignment 5

Simulation:



Source code:

```
#####
```

Partitionned EDF using PartitionedScheduler.

```
#####
```

```
from simso.core.Scheduler import SchedulerInfo
```

```
from simso.utils import PartitionedScheduler
```

```
from simso.schedulers import scheduler
```

```
@scheduler("simso.schedulers.P_RM")
```

```
class P_RM(PartitionedScheduler):
```

```
    def init(self):
```

```
        PartitionedScheduler.init(
```

```
            self, SchedulerInfo("simso.schedulers.RM_mono"))
```

```

def packer(self):
    # First Fit
    cpus = [[cpu, 0] for cpu in self.processors]
    n = [0] * len(cpus)
    for task in self.task_list:
        j = 0
        # Find the processor with the lowest load.
        for i, c in enumerate(cpus):
            
$$U_{rm} = (n[i]+1.0) * ((\text{pow}(2.0, 1/(n[i]+1.0))) - 1.0)$$

            u = (c[1] + (task.wcet / task.period))
            if u < Urm:
                j = i
                break
        n[j] = n[j] + 1

        # Affect it to the task.
        self.affect_task_to_processor(task, cpus[j][0])

        # Update utilization.
        cpus[j][1] += float(task.wcet) / task.period
    return True

```

See next page also:

Output:

[illegible]