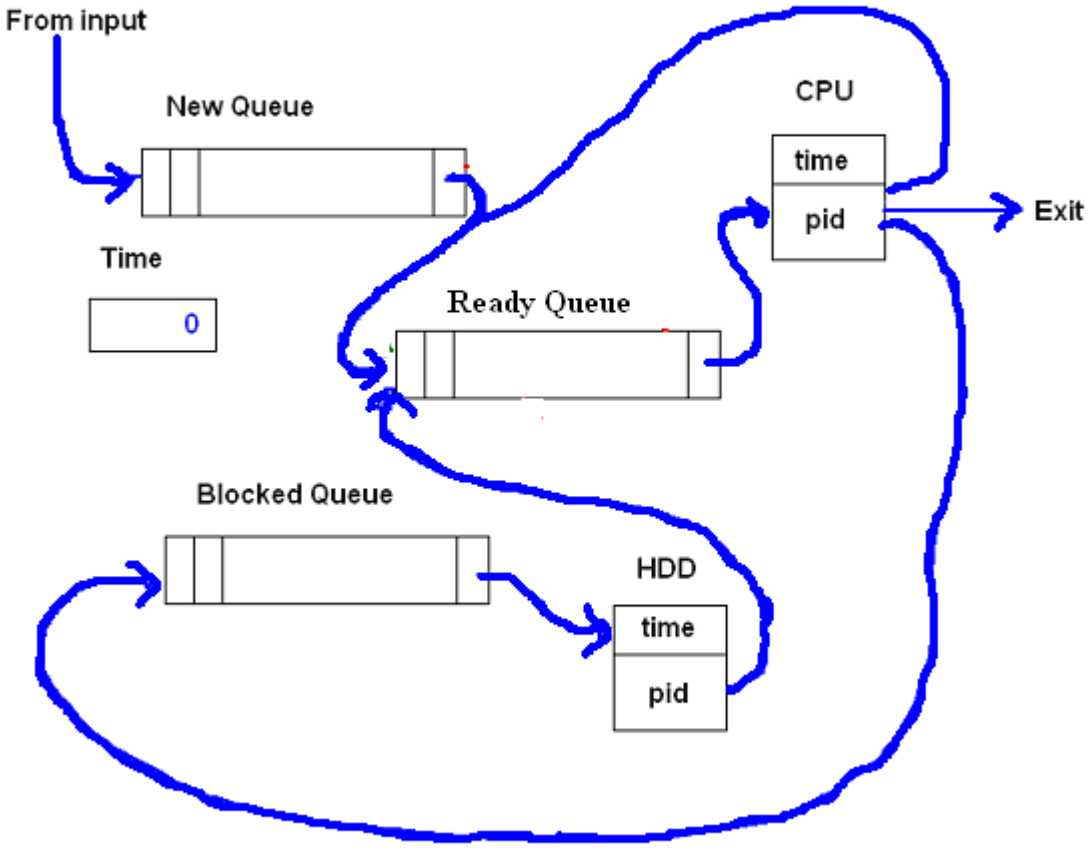
Diagrams below represent possible transactions in your simulation for the Round Robin and Shortest Remaining Time scheduling. Every box in diagram represents a data structure or primitive type variable. For example, **`Time`** is integer type variable that represents global time of your simulation in milliseconds. It is incremented on every iteration of your main simulation loop. When **`Time`** becomes equal to the arrival time of the front entry in the **New Queue,** the process is moved from the front of new queue to the **Ready Queue**.

Another example: **`HDD->time`** is set to **<hard_drive_service_time>** (for example 800) when a process is picked from the front of **Blocked Queue** to be serviced by HDD. **HDD->time** is decremented on every iteration of main simulation loop. When it reaches 0 the process **HDD->pid** is moved to the **Ready Queue**.

One more example: **`CPU->time`** is set to **<quantum_size>** (for example 500) when process **pid** is picked up from the front of **Ready Queue**. This time is decremented on every iteration of simulation and when it reaches 0 the process **pid** will be moved to the end of the **Ready Queue**. Note, that the process **pid** can be also moved to the end of **Blocked Queue** if HDD request happens while process holds the CPU.

Round Robin scheduling



Shortest Remaining Time scheduling