

Assignment-5

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1 Abstract

In this assignment we upgraded our processor to handle discrete events. An event consists of *event time*, *event type*, *requesting element*, *processing element*, *payload*. Event queue maintains queue of events with respect to time. When an event is invoked, *handleEvent()* method of the processor is invoked. Handling an event might trigger other events to be invoked in the current cycle or any future cycle.

Program Name	Cycles	IPC
descending.asm	11779	0.023516428
evenorodd.asm	259	0.023166023
palindrome.asm	2062	0.023763336
fibonacci.asm	3581	0.021781625
prime.asm	1219	0.023789993

2 Observations

All of the benchmark programmes' IPCs (Instructions per Cycle) are found to be between 0.021 and 0.024. Cycle counts are larger for benchmarks with more hazards and, thus, more iterations.