

Task1

```
--Performance Counter Report--
Total Time: 4.89763 seconds (244881300 clock-cycles)
+-----+
| Section      | % | Time (sec)| Time (clocks)|Occurrences|
+-----+
| task 1       | 100| 4.89762| 244881026| 1|
+-----+
Task1 complete
Task1 start
--Performance Counter Report--
Total Time: 0.890615 seconds (44530743 clock-cycles)
+-----+
| Section      | % | Time (sec)| Time (clocks)|Occurrences|
+-----+
| task 2       | 100| 0.89061| 44530478| 1|
+-----+
```

```
--Performance Counter Report--
Total Time: 4.89764 seconds (244882194 clock-cycles)
+-----+
| Section      | % | Time (sec)| Time (clocks)|Occurrences|
+-----+
| task 1       | 100| 4.89764| 244881920| 1|
+-----+
Task1 complete
Task1 start
--Performance Counter Report--
Total Time: 0.909933 seconds (45496646 clock-cycles)
+-----+
| Section      | % | Time (sec)| Time (clocks)|Occurrences|
+-----+
| task 2       | 100| 0.90993| 45496381| 1|
+-----+
--Performance Counter Report--
Total Time: 0.480604 seconds (24030199 clock-cycles)
+-----+
| Section      | % | Time (sec)| Time (clocks)|Occurrences|
+-----+
| task 3       | 100| 0.48060| 24029934| 1|
+-----+
```

```
Statistics
text      data      bss      dec      hex filename
74412    56324    49428    180164    2bfc4 lab2.elf
```

Task2

```
--Performance Counter Report--
Total Time: 0.616966 seconds (30848307 clock-cycles)
+-----+
| Section      | % | Time (sec)| Time (clocks)|Occurrences|
+-----+
| task 1       | 100| 0.61696| 30848042| 1|
+-----+
```

```
--Performance Counter Report--
Total Time: 0.299731 seconds (14986564 clock-cycles)
+-----+
| Section      | % | Time (sec)| Time (clocks)|Occurrences|
+-----+
| task 2       | 100| 0.29973| 14986299| 1|
+-----+
```

```
--Performance Counter Report--
Total Time: 0.624308 seconds (31215383 clock-cycles)
+-----+-----+-----+-----+-----+
| Section      | % | Time (sec)| Time (clocks)|Occurrences|
+-----+-----+-----+-----+-----+
|task 3        | 100| 0.62430| 31215118| 1|
+-----+-----+-----+-----+-----+
```

text	data	bss	dec	hex	filename
74296	56324	49428	180048	2bf50	lab2.elf

Task3

```
--Performance Counter Report--
Total Time: 0.530134 seconds (26506690 clock-cycles)
+-----+-----+-----+-----+-----+
| Section      | % | Time (sec)| Time (clocks)|Occurrences|
+-----+-----+-----+-----+-----+
|Section 3     | 100| 0.53013| 26506425| 1|
+-----+-----+-----+-----+-----+
Task3 Complete
Task1 start
The image is: 64 x 64!!
--Performance Counter Report--
Total Time: 0 seconds (0 clock-cycles)
+-----+-----+-----+-----+-----+
| Section      | % | Time (sec)| Time (clocks)|Occurrences|
+-----+-----+-----+-----+-----+
|Section 1     | nan| 0.00000| 0| 0|
+-----+-----+-----+-----+-----+
Task1 complete
Task2 start
Task2 complete
--Performance Counter Report--
Total Time: 5.58721 seconds (279360616 clock-cycles)
+-----+-----+-----+-----+-----+
| Section      | % | Time (sec)| Time (clocks)|Occurrences|
+-----+-----+-----+-----+-----+
|Section 2     | 100| 5.58687| 279343511| 1|
+-----+-----+-----+-----+-----+
Task3 start
```

Statistics					
text	data	bss	dec	hex	filename
73408	56324	49376	179108	2bba4	lab2.elf

Task4

```
--Performance Counter Report--
Total Time: 4.89764 seconds (244882194 clock-cycles)
+-----+-----+-----+-----+
| Section      | % | Time (sec)| Time (clocks)| Occurrences|
+-----+-----+-----+-----+
| task 1       | 100| 4.89764| 244881920| 1|
+-----+-----+-----+-----+
Task1 complete
Task1 start
--Performance Counter Report--
Total Time: 0.909933 seconds (45496646 clock-cycles)
+-----+-----+-----+-----+
| Section      | % | Time (sec)| Time (clocks)| Occurrences|
+-----+-----+-----+-----+
| task 2       | 100| 0.90993| 45496381| 1|
+-----+-----+-----+-----+
--Performance Counter Report--
Total Time: 0.480604 seconds (24030199 clock-cycles)
+-----+-----+-----+-----+
| Section      | % | Time (sec)| Time (clocks)| Occurrences|
+-----+-----+-----+-----+
| task 3       | 100| 0.48060| 24029934| 1|
+-----+-----+-----+-----+
```

[illegible]

Task 5

```

Statistics
  text    data    bss    dec    hex filename
  7320    328     16    7664   1df0 task5_1.elf

```

```

Statistics
  text    data    bss    dec    hex filename
  5212    348     16    5576   15c8 task5_2.elf

```

```

--Performance Counter Report--
Total Time : 5182905 usec (259145271 clock-cycles)
+-----+-----+-----+-----+-----+
| Section      | % | Time (usec)| Time (clocks)|Occurrences |
+-----+-----+-----+-----+-----+
|      GraySDF | 99 |   5182900 |   259145009 |           1 |
+-----+-----+-----+-----+-----+

```

Task 9

1. A shared memory which is large enough.
2. Parallelism
3. Balanced workload