

Scenario	1.Depleted EC2	2.EC2	3.VM(WSL2)	4.Local
CPU Speed (GHz)	<4.0	<4.0	2.6	2.6
Time to run cpu_test.py (seconds)	0.436	0.054	0.011	0.015

Code for cpu_test.py

```
import time

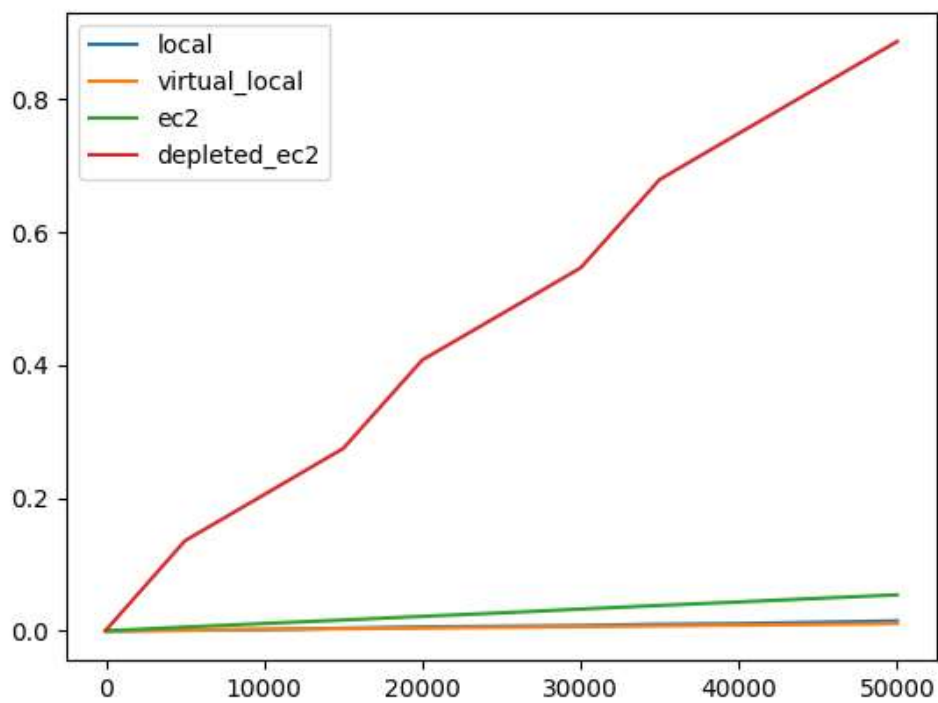
if __name__ == "__main__":
    f = open("result.txt", "w")
    l = list()
    start = time.time()
    for i in range(50001):
        l.append([i, time.time() - start])

    for e in l:
        f.write(str(e[0]) + " " + str(e[1]) + "\n")

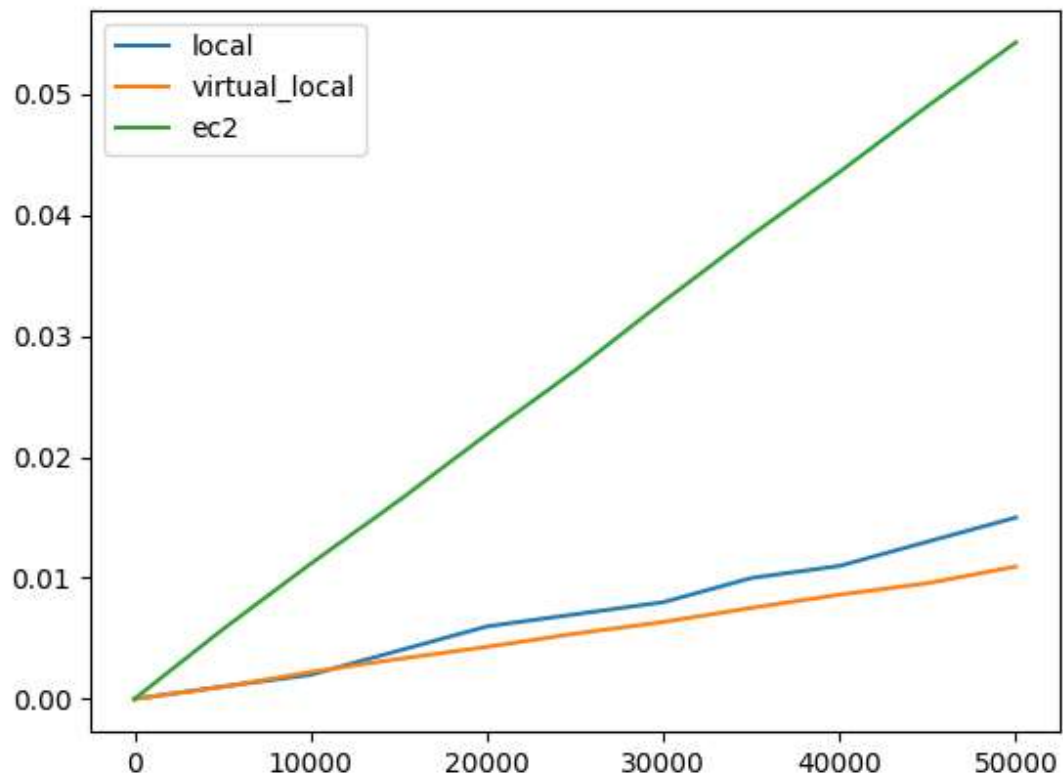
    toprint = list()
    for a in range(50001):
        if a % 5000 == 0:
            toprint.append(l[a][1])
    print(toprint)
```

Speed

With depleted ec2

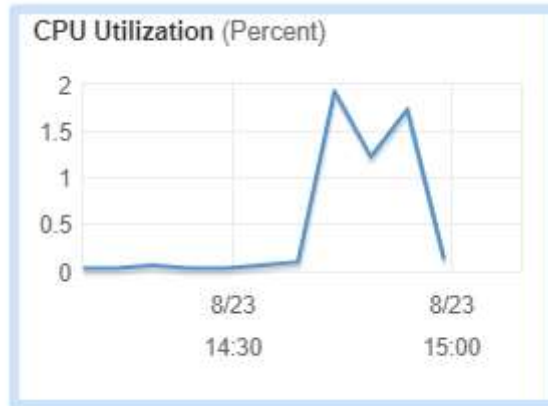


Without depleted EC2



CPU usage

None of our test really put a stress on CPU.



CPU

Intel(R) Core(TM) i7-10750H CPU @ 2.60GHz



Questions

1.1 Number of computation unit allocated to you.

1.2 No one get all computation power of the machine

1.3 More user can be allowed on the same machine

2.Scenario with credit. As you can see in the plot, credit give you a lightyear ahead in computation power.

3.Yes, it took shorter to do `cpu_test.py` and I don't have to share my laptop with anyone.

4.Surprisingly VM perform better than without VM but the answer is not too surprising as our test is very basic on a very high level of abstraction.