

Server registration

From 1:00 to 5:00 pm:

- Specify the **backend** as `ibmq_kolkata`
- Specify the **instance** as `rpi/internal/reservations`
 - You can see this on your account
- You can also use `rpi/general/hackathonf23` with normal queueing
- You will get a **warning** when you submit a job but that is normal
- `rpi/general/hackathonf23` will be open for the next week

Below is an example test script I ran to validate the reservation usage.

```
import os
from qiskit_ibm_runtime import QiskitRuntimeService, Session, Options, Sampler
from qiskit import QuantumCircuit

#Reads auth token from env variable QISKIT_IBM_TOKEN
#note the backend="ibmq_kolkata" and instance="rpi/internal/reservations"
service = QiskitRuntimeService(channel="ibm_quantum", instance="rpi/internal/reservations", token="YOUR ACCESS TOKEN" )

options = Options(optimization_level=1)
options.execution.shots = 1024 # Options can be set using auto-complete.

bell = QuantumCircuit(2)
bell.h(0)
bell.cx(0, 1)
bell.measure_all()

with Session(service=service, backend="ibmq_kolkata") as session:
    sampler = Sampler(session=session, options=options)
    job = sampler.run(circuits=bell)
    print(f"Job ID is {job.job_id()}")
    print(f"Job result is {job.result()}")
```