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pip install simpy
```

```
Looking in indexes: https://pypi.org/simple, https://us-python.pkg.dev/colab-wheels/public/simple/
Collecting simpy
  Downloading simpy-4.0.1-py2.py3-none-any.whl (29 kB)
Installing collected packages: simpy
Successfully installed simpy-4.0.1
```

(1) WAP to show that callbacks can be added to the event as long as the event is not processed.

(2) With the help of a example show that events can be shared.

```
import simpy
```

```
# (1) WAP to show that callbacks can be added to the event as long as the event is not processed.
```

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import simpy
```

```
def shop(env):
    while True:
        print("people to serve %d" % env.now)
        people_in_line = 9
        yield env.timeout(env.now + people_in_line)

env = simpy.rt.RealtimeEnvironment(initial_time = 5)
event = env.event()
env.process(shop(env))
env.run(until=30)
event.callbacks.append(shop)
event.callbacks
```

```
people to serve 5
people to serve 19
[<function __main__.shop(env)>]
```

```
import simpy
```

```
# (2) With the help of a example show that events can be shared.
```

```
m=2
```

```
class Hotel:
    def __init__(self, env):
        self.env = env
        self.class_ends = env.event()
        self.guests_process = [env.process(self.guests()) for _ in range(m*2)]
        self.bell_process = env.process(self.bell())

    def bell(self):
        for _ in range(m):
            yield self.env.timeout(45)
            self.class_ends.succeed()
            self.class_ends = self.env.event()
            print()

    def guests(self):
        for _ in range(2):
            print("guest entering the hotel!")
            yield self.class_ends
```

```
env = simpy.Environment()
h1 = Hotel(env)
env.run()
```

```
guest entering the hotel!
guest entering the hotel!
guest entering the hotel!
guest entering the hotel!
```

```
guest entering the hotel!
guest entering the hotel!
guest entering the hotel!
guest entering the hotel!
```

