

COMP41610 – Practical 2 – Neil Grogan

- 13204052

Neil Grogan

February 28, 2014

Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS	Public IP
i-247b2105	t1.micro	us-east-1c	running	2/2 check...	None	ec2-54-234-233-48.com...	54.234.233.48

Q. Date and time of this instance?

```
Neils-MacBook-Air:~ ngrogan$ ssh ec2-user@54.234.233.48

  __|  __|_  )
 _| (    /   Amazon Linux AMI
---|\___|___|

https://aws.amazon.com/amazon-linux-ami/2013.09-release-notes/
9 package(s) needed for security, out of 30 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-10-179-53-130 ~]$ date
Tue Feb 25 19:12:06 UTC 2014
```

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Q. How long has the system been running?

```
Neils-MacBook-Air:~ ngrogan$ ssh ec2-user@54.234.233.48

  __|  __|_  )
  _| (      /   Amazon Linux AMI
  ---|\___|___|

https://aws.amazon.com/amazon-linux-ami/2013.09-release-notes/
9 package(s) needed for security, out of 30 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-10-179-53-130 ~]$ date
Tue Feb 25 19:12:06 UTC 2014
[ec2-user@ip-10-179-53-130 ~]$ uptime
19:12:37 up 2 min,  1 user,  load average: 0.17, 0.18, 0.07
```

Q. Name and version of Operating Systems running on this instance?

```
Neils-MacBook-Air:~ ngrogan$ ssh ec2-user@54.234.233.48

  __|  __|_  )
  _| (      /   Amazon Linux AMI
  ---|\___|___|

https://aws.amazon.com/amazon-linux-ami/2013.09-release-notes/
9 package(s) needed for security, out of 30 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-10-179-53-130 ~]$ date
Tue Feb 25 19:12:06 UTC 2014
[ec2-user@ip-10-179-53-130 ~]$ uptime
19:12:37 up 2 min,  1 user,  load average: 0.17, 0.18, 0.07
[ec2-user@ip-10-179-53-130 ~]$ uname -r
3.4.73-64.112.amzn1.x86_64
```

Q. Who is logged in?

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```
Neils-MacBook-Air:~ ngrogan$ ssh ec2-user@54.234.233.48

  __|  __|_  )
  _| (      /   Amazon Linux AMI
  ---|\___|___|

https://aws.amazon.com/amazon-linux-ami/2013.09-release-notes/
9 package(s) needed for security, out of 30 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-10-179-53-130 ~]$ date
Tue Feb 25 19:12:06 UTC 2014
[ec2-user@ip-10-179-53-130 ~]$ uptime
 19:12:37 up 2 min,  1 user,  load average: 0.17, 0.18, 0.07
[ec2-user@ip-10-179-53-130 ~]$ uname -r
3.4.73-64.112.amzn1.x86_64
[ec2-user@ip-10-179-53-130 ~]$ whoami
ec2-user
```

Q. Who is running what? (Hint: using *top* or *ps* command)

```
Neils-MacBook-Air:~ ngrogan$ ssh ec2-user@54.234.233.48

  __|  __|_  )
  _| (      /   Amazon Linux AMI
  ---|\___|___|

https://aws.amazon.com/amazon-linux-ami/2013.09-release-notes/
9 package(s) needed for security, out of 30 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-10-179-53-130 ~]$ date
Tue Feb 25 19:12:06 UTC 2014
[ec2-user@ip-10-179-53-130 ~]$ uptime
 19:12:37 up 2 min,  1 user,  load average: 0.17, 0.18, 0.07
[ec2-user@ip-10-179-53-130 ~]$ uname -r
3.4.73-64.112.amzn1.x86_64
[ec2-user@ip-10-179-53-130 ~]$ whoami
ec2-user
[ec2-user@ip-10-179-53-130 ~]$ ps
  PID TTY          TIME CMD
 1318 pts/0        00:00:00 bash
 1341 pts/0        00:00:00 ps
```

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```
top - 19:14:13 up 4 min, 1 user, load average: 0.03, 0.13, 0.06
Tasks: 55 total, 1 running, 54 sleeping, 0 stopped, 0 zombie
Cpu(s): 0.0%us, 0.0%sy, 0.0%ni,100.0%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Mem: 608292k total, 373004k used, 235288k free, 9788k buffers
Swap: 0k total, 0k used, 0k free, 315844k cached
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1	root	20	0	19356	1540	1240	S	0.0	0.3	0:00.64	init
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kthreadd
3	root	20	0	0	0	0	S	0.0	0.0	0:00.00	ksoftirqd/0
4	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kworker/0:0
5	root	20	0	0	0	0	S	0.0	0.0	0:00.01	kworker/u:0
6	root	RT	0	0	0	0	S	0.0	0.0	0:00.00	migration/0
7	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	cpuset
8	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	khelper
9	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kdevtmpfs
10	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	netns
11	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kworker/u:1
15	root	20	0	0	0	0	S	0.0	0.0	0:00.00	xenwatch
16	root	20	0	0	0	0	S	0.0	0.0	0:00.50	xenbus
83	root	20	0	0	0	0	S	0.0	0.0	0:00.00	sync_supers
85	root	20	0	0	0	0	S	0.0	0.0	0:00.00	bdi-default
86	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kintegrityd
88	root	0	-20	0	0	0	S	0.0	0.0	0:00.00	kblockd
97	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kworker/0:1

Q. Which devices are there?

```
[ec2-user@ip-10-179-53-130 ~]$ mount
/dev/xvda1 on / type ext4 (rw,noatime)
proc on /proc type proc (rw)
sysfs on /sys type sysfs (rw)
devpts on /dev/pts type devpts (rw,gid=5,mode=620)
tmpfs on /dev/shm type tmpfs (rw)
none on /proc/sys/fs/binfmt_misc type binfmt_misc (rw)
```

Q. What has the user been doing? (command-line history)

```
[ec2-user@ip-10-179-53-130 ~]$ history
 1  date
 2  uptime
 3  uname -r
 4  whoami
 5  ps
 6  top
 7  fdisk -l
 8  ls /dev
 9  mount
10  history
```

Create the Domain Car

All from Car:

```
<SelectResponse xmlns="http://sdb.amazonaws.com/doc/2009-04-15/">
<script/>
<SelectResult>
<Item>
<Name>Audi</Name>
<Attribute>
<Name>Year</Name>
<Value>78</Value>
</Attribute>
<Attribute>
<Name>Year</Name>
<Value>73</Value>
</Attribute>
<Attribute>
<Name>Year</Name>
<Value>75</Value>
</Attribute>
<Attribute>
<Name>Year</Name>
<Value>70</Value>
</Attribute>
<Attribute>
<Name>mpg</Name>
<Value>23</Value>
</Attribute>
<Attribute>
<Name>mpg</Name>
<Value>20</Value>
</Attribute>
<Attribute>
```

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```
<Name>mpg</Name>
<Value>24</Value>
</Attribute>
<Attribute>
<Name>Weight</Name>
<Value>2400</Value>
</Attribute>
<Attribute>
<Name>Cylinders</Name>
<Value>4</Value>
</Attribute>
<Attribute>
<Name>Cylinders</Name>
<Value>5</Value>
</Attribute>
<Attribute>
<Name>Power</Name>
<Value>102</Value>
</Attribute>
</Item>
<Item>
<Name>Chevrolet</Name>
<Attribute>
<Name>Year</Name>
<Value>78</Value>
</Attribute>
<Attribute>
<Name>Year</Name>
<Value>80</Value>
</Attribute>
<Attribute>
<Name>Year</Name>
<Value>77</Value>
</Attribute>
<Attribute>
<Name>mpg</Name>
<Value>17</Value>
</Attribute>
<Attribute>
<Name>Weight</Name>
<Value>2035</Value>
</Attribute>
<Attribute>
<Name>Weight</Name>
<Value>2051</Value>
</Attribute>
<Attribute>
<Name>Cylinders</Name>
<Value>6</Value>
</Attribute>
<Attribute>
<Name>Cylinders</Name>
<Value>4</Value>
</Attribute>
<Attribute>
<Name>Cylinders</Name>
<Value>8</Value>
</Attribute>
<Attribute>
```

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```
<Name>Power</Name>
<Value>85</Value>
</Attribute>
</Item>
<Item>
<Name>Fiat</Name>
<Attribute>
<Name>Year</Name>
<Value>81</Value>
</Attribute>
<Attribute>
<Name>mpg</Name>
<Value>37</Value>
</Attribute>
<Attribute>
<Name>Weight</Name>
<Value>1867</Value>
</Attribute>
<Attribute>
<Name>Cylinders</Name>
<Value>4</Value>
</Attribute>
<Attribute>
<Name>Power</Name>
<Value>30</Value>
</Attribute>
</Item>
</SelectResult>
<ResponseMetadata>
<RequestId>e68293fc-b276-d52d-2f33-7b3a4fe9c94b</RequestId>
<BoxUsage>0.0000411449</BoxUsage>
</ResponseMetadata>
</SelectResponse>
```

Query the Domain Car for all items with Year 78

Query is: **select * from Car where Year = '78'**

Response:

```
<SelectResponse xmlns="http://sdb.amazonaws.com/doc/2009-04-15/">
<script/>
<SelectResult>
<Item>
<Name>Audi</Name>
<Attribute>
<Name>Year</Name>
<Value>78</Value>
</Attribute>
<Attribute>
<Name>Year</Name>
<Value>73</Value>
</Attribute>
<Attribute>
<Name>Year</Name>
<Value>75</Value>
</Attribute>
<Attribute>
```

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```
<Name>Year</Name>
<Value>70</Value>
</Attribute>
<Attribute>
<Name>mpg</Name>
<Value>23</Value>
</Attribute>
<Attribute>
<Name>mpg</Name>
<Value>20</Value>
</Attribute>
<Attribute>
<Name>mpg</Name>
<Value>24</Value>
</Attribute>
<Attribute>
<Name>Weight</Name>
<Value>2400</Value>
</Attribute>
<Attribute>
<Name>Cylinders</Name>
<Value>4</Value>
</Attribute>
<Attribute>
<Name>Cylinders</Name>
<Value>5</Value>
</Attribute>
<Attribute>
<Name>Power</Name>
<Value>102</Value>
</Attribute>
</Item>
<Item>
<Name>Chevrolet</Name>
<Attribute>
<Name>Year</Name>
<Value>78</Value>
</Attribute>
<Attribute>
<Name>Year</Name>
<Value>80</Value>
</Attribute>
<Attribute>
<Name>Year</Name>
<Value>77</Value>
</Attribute>
<Attribute>
<Name>mpg</Name>
<Value>17</Value>
</Attribute>
<Attribute>
<Name>Weight</Name>
<Value>2035</Value>
</Attribute>
<Attribute>
<Name>Weight</Name>
<Value>2051</Value>
</Attribute>
<Attribute>
```

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```
<Name>Cylinders</Name>
<Value>6</Value>
</Attribute>
<Attribute>
<Name>Cylinders</Name>
<Value>4</Value>
</Attribute>
<Attribute>
<Name>Cylinders</Name>
<Value>8</Value>
</Attribute>
<Attribute>
<Name>Power</Name>
<Value>85</Value>
</Attribute>
</Item>
</SelectResult>
<ResponseMetadata>
<RequestId>7ae94e50-a76b-0b75-ed7d-23eb1ac1265f</RequestId>
<BoxUsage>0.0000320033</BoxUsage>
</ResponseMetadata>
</SelectResponse>
```

Update the Weight attribute of Audi with 3000

Update:



BatchPutAttributes

The screenshot shows the AWS BatchPutAttributes console interface. At the top, the 'Domain Name' is set to 'Car'. Below this, there is a dashed box labeled 'Item' containing an 'Item Name' field set to 'Audi'. Inside the 'Item' box, there is another dashed box labeled 'Attribute' containing three fields: 'Name' set to 'Weight', 'Value' set to '3000', and 'Replace' set to 'true'. The interface includes expand/collapse arrows and add/remove icons for the Item and Attribute sections.

Read it back:

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GetAttributes




Domain Name	<input type="text" value="Car"/>	 
Item Name	<input type="text" value="Audi"/>	
Attribute Name	<input type="text" value="Weight"/>	
Consistent Read	<input type="text"/>	

Response:

```
<GetAttributesResponse xmlns="http://sdb.amazonaws.com/doc/2009-04-15/">
  <script/>
  <GetAttributesResult>
    <Attribute>
      <Name>Weight</Name>
      <Value>3000</Value>
    </Attribute>
  </GetAttributesResult>
  <ResponseMetadata>
    <RequestId>84d6654b-64aa-85cd-9479-c656592cb867</RequestId>
    <BoxUsage>0.0000093222</BoxUsage>
  </ResponseMetadata>
</GetAttributesResponse>
```

Delete the value 8 from the Cylinders attribute of Chevrolet

DeleteAttributes

Domain Name	<input type="text" value="Car"/>				
Item Name	<input type="text" value="Chevrolet"/>				
<div> Attribute  </div> <table><tr><td>Name</td><td><input type="text" value="Cylinders"/></td></tr><tr><td>Value</td><td><input type="text" value="8"/></td></tr></table>		Name	<input type="text" value="Cylinders"/>	Value	<input type="text" value="8"/>
Name	<input type="text" value="Cylinders"/>				
Value	<input type="text" value="8"/>				

Read it back:

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GetAttributes

A screenshot of a web interface for the GetAttributes API. It features three input fields: 'Domain Name' with the value 'Car', 'Item Name' with the value 'Chevrolet', and 'Attribute Name' with the value 'Cylinders'. To the right of the 'Attribute Name' field is a green plus icon. The interface is enclosed in a light gray border.

Response:

```
<GetAttributesResponse xmlns="http://sdb.amazonaws.com/doc/2009-04-15/">
  <script/>
  <GetAttributesResult>
    <Attribute>
      <Name>Cylinders</Name>
      <Value>4</Value>
    </Attribute>
    <Attribute>
      <Name>Cylinders</Name>
      <Value>6</Value>
    </Attribute>
  </GetAttributesResult>
  <ResponseMetadata>
    <RequestId>f3bc16c4-ddfc-9a08-8ebc-f12d37ef77e4</RequestId>
    <BoxUsage>0.0000093222</BoxUsage>
  </ResponseMetadata>
</GetAttributesResponse>
```

Delete the Domain Car

DeleteDomain

A screenshot of a web interface for the DeleteDomain API. It shows a single input field labeled 'Domain Name' with the value 'Car'. The interface is enclosed in a light gray border.

Read it back:

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ListDomains

Max Number Of Domains	10
Next Token	

Response:

```
<ListDomainsResponse xmlns="http://sdb.amazonaws.com/doc/2009-04-15/">
  <script/>
  <ListDomainsResult/>
  <ResponseMetadata>
    <RequestId>6d9eab71-d5ab-1ac5-b3fd-d88fb355050d</RequestId>
    <BoxUsage>0.0000071759</BoxUsage>
  </ResponseMetadata>
</ListDomainsResponse>
```