

Lab.

OCI DATA SCIENCE



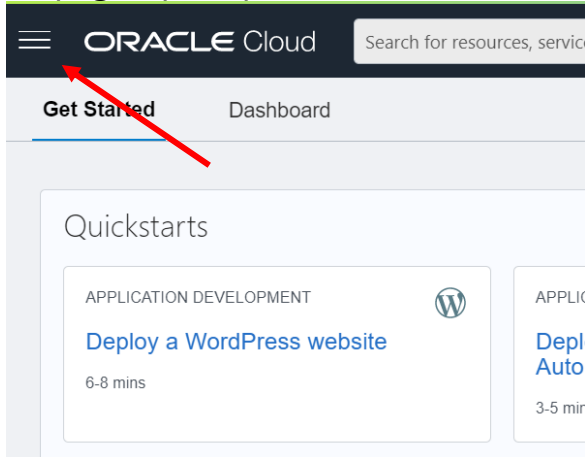
Este Lab apresenta como acessar e utilizar o ambiente OCI Data Science

OCI Data & AI Fast Track – Hands-on Lab

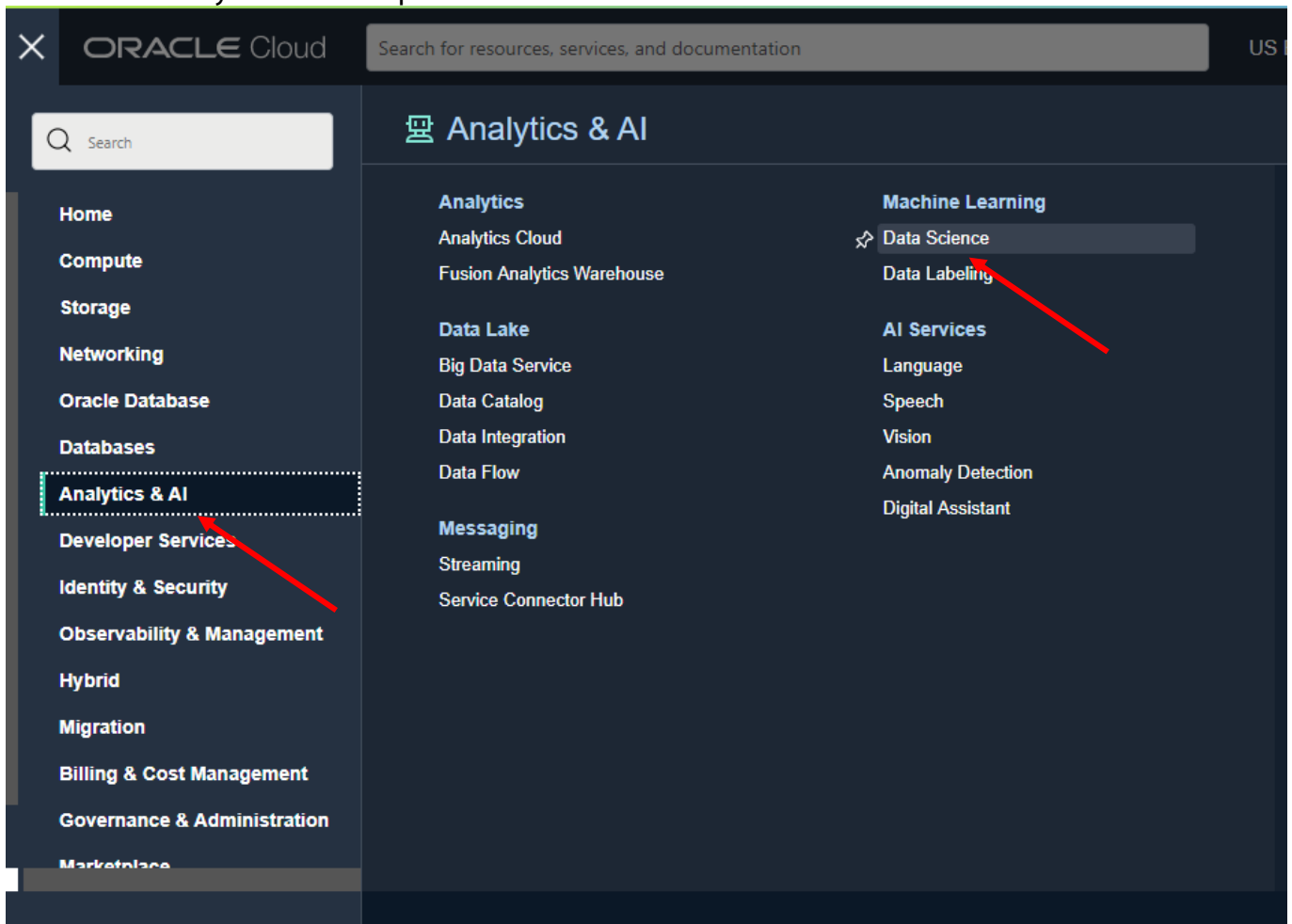
Instância de Data Science

Acessando a Instância

Na página principal da Oracle Cloud, clicar no menu “hamburger”:

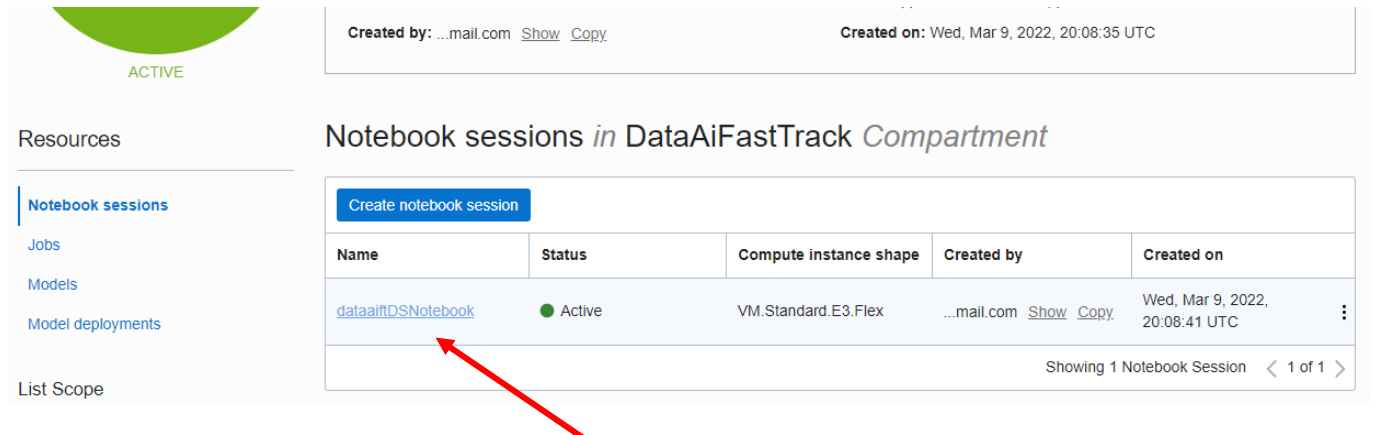


Clicar em “Analytics & AI” e após em “Data Science”:



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Na próxima tela clicar no ‘Name’ do projeto, conforme abaixo:



Created by: ...mail.com [Show](#) [Copy](#) Created on: Wed, Mar 9, 2022, 20:08:35 UTC

Resources

- Notebook sessions
- Jobs
- Models
- Model deployments

List Scope

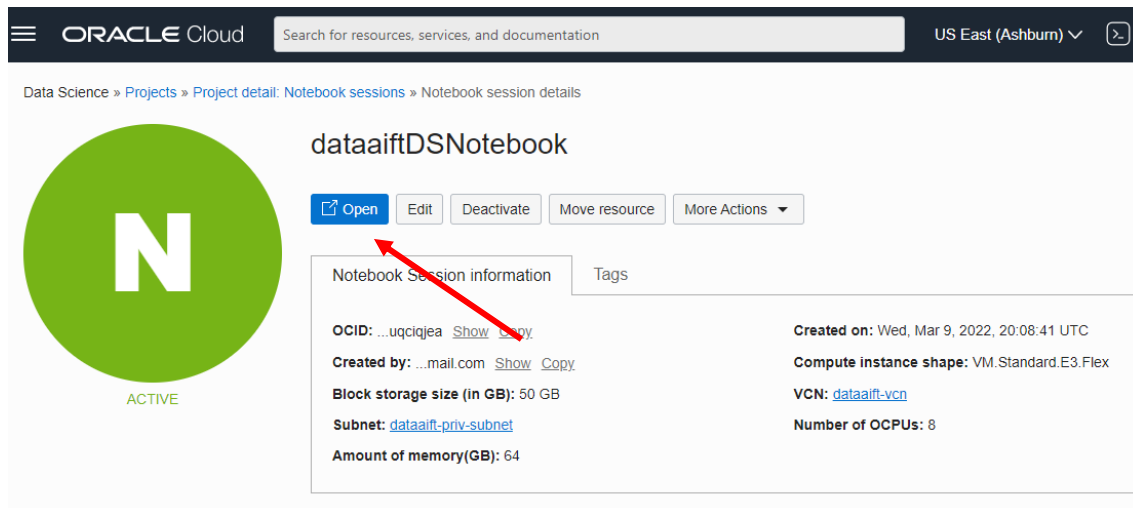
Notebook sessions in DataAiFastTrack *Compartment*

Create notebook session

Name	Status	Compute instance shape	Created by	Created on
dataaiftDSNotebook	Active	VM.Standard.E3.Flex	...mail.com Show Copy	Wed, Mar 9, 2022, 20:08:41 UTC

Showing 1 Notebook Session < 1 of 1 >

E na próxima tela, clicar em “Open”:



ORACLE Cloud Search for resources, services, and documentation US East (Ashburn) >

Data Science » Projects » Project detail: Notebook sessions » Notebook session details

dataaiftDSNotebook

[Open](#) [Edit](#) [Deactivate](#) [Move resource](#) [More Actions](#)

ACTIVE

Notebook Session information

OCID: ...uqciqjea [Show](#) [Copy](#) Created on: Wed, Mar 9, 2022, 20:08:41 UTC

Created by: ...mail.com [Show](#) [Copy](#) Compute instance shape: VM.Standard.E3.Flex

Block storage size (in GB): 50 GB VCN: [dataaift-vcn](#)

Subnet: [dataaift-priv-subnet](#) Number of OCPUs: 8

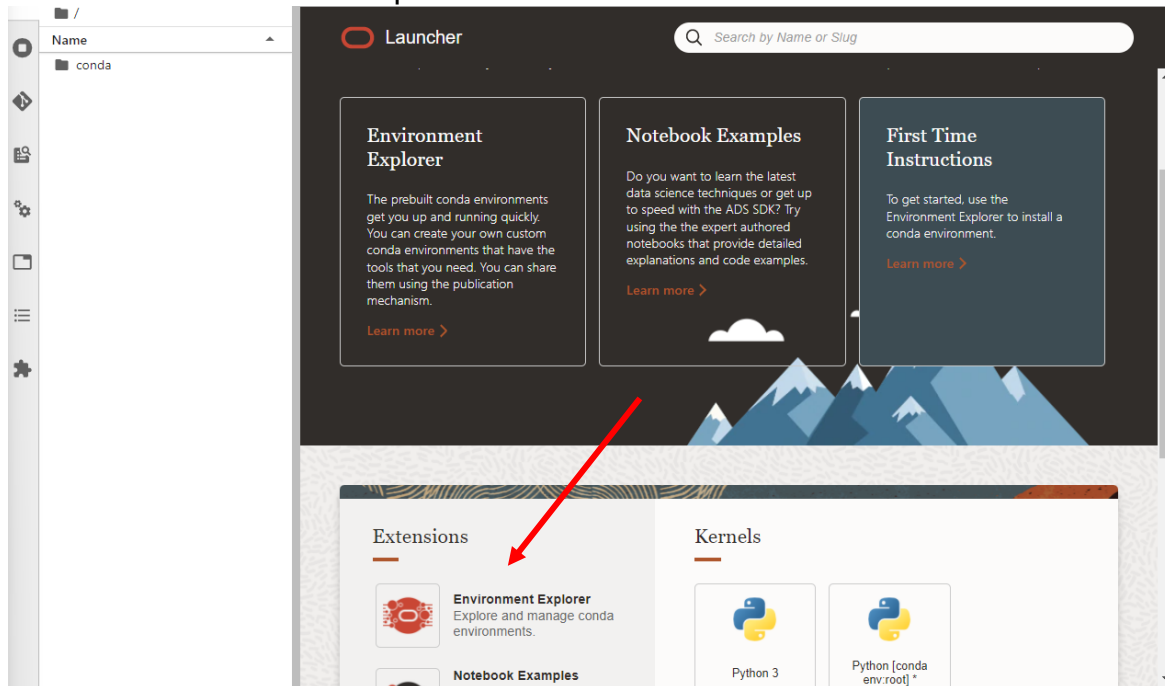
Amount of memory(GB): 64

Agora será necessário instalar um Kernel para podermos trabalhar um exemplo de Modelagem de Dados.

Na tela abaixo, seguir as seguintes instruções:

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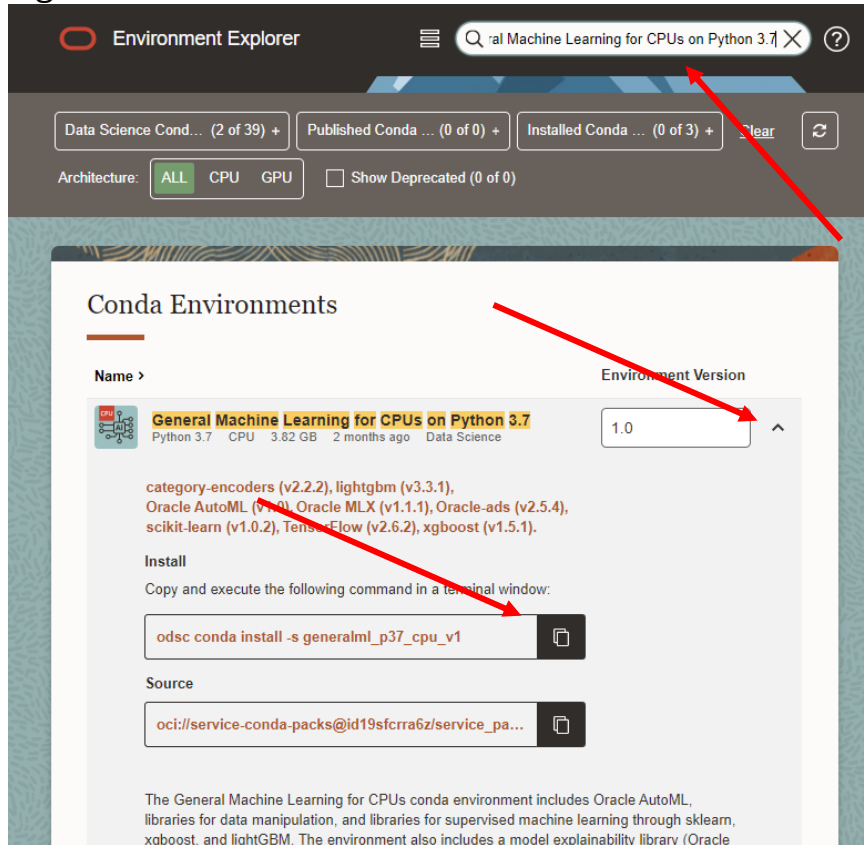
Clicar em “Environment Explorer”:



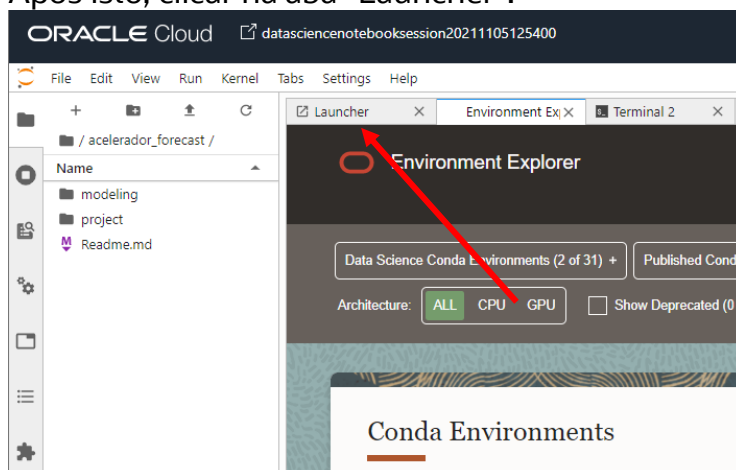
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Ao abrir a tela abaixo, procurar por “**General Machine Learning for CPUs on Python 3.7**” (copiar e colar no buscador), na linha com o nome do environment, clicar no último elemento à direita (seta para baixo).

Ao fazer isto aparecerão mais detalhes sobre o environment, clicar no botão/ícone de “copiar” logo abaixo de “Install”:

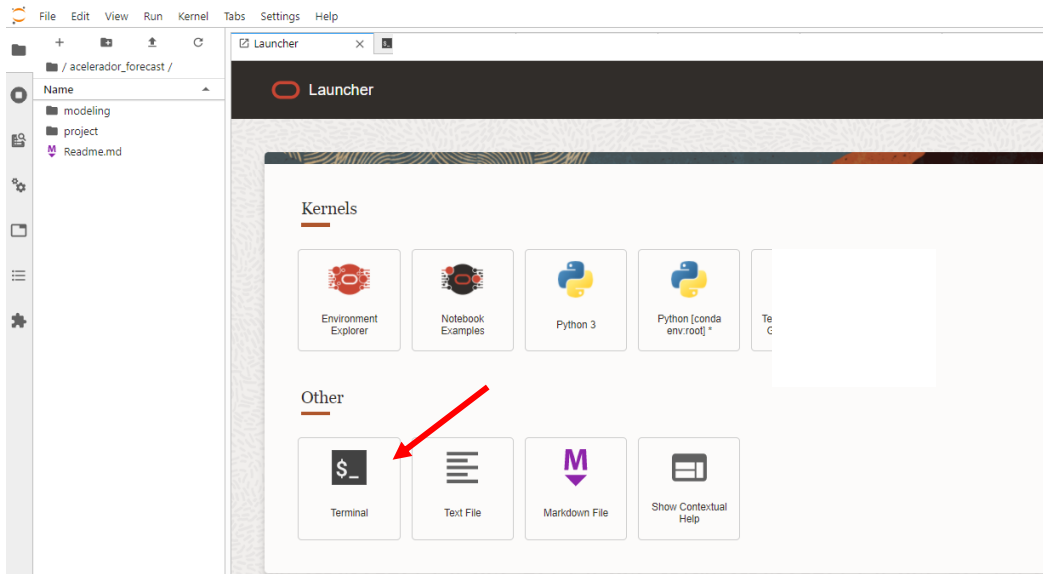


Após isto, clicar na aba “Launcher”:

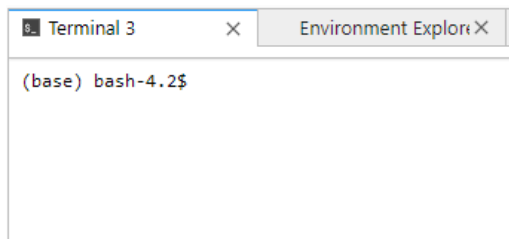


E quando aparecer a tela abaixo, clicar em “Terminal”:

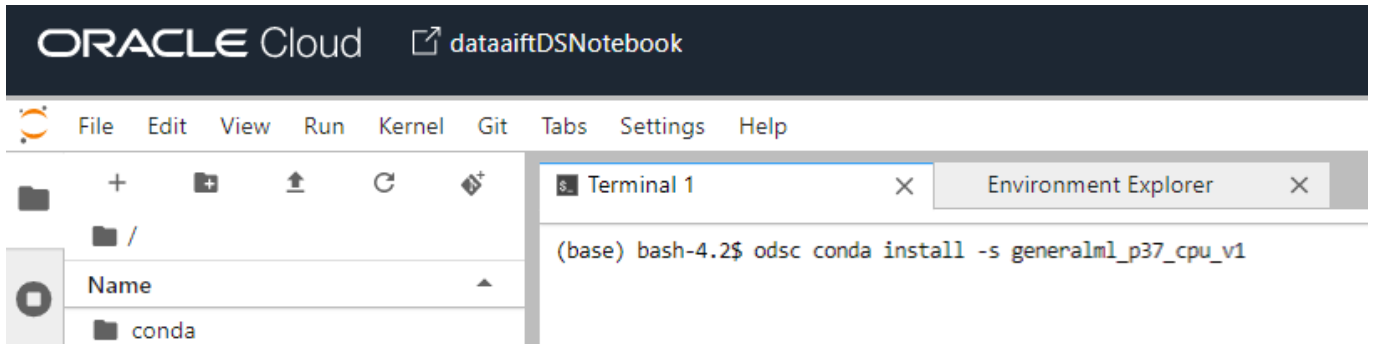
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Isto abrirá a tela abaixo:

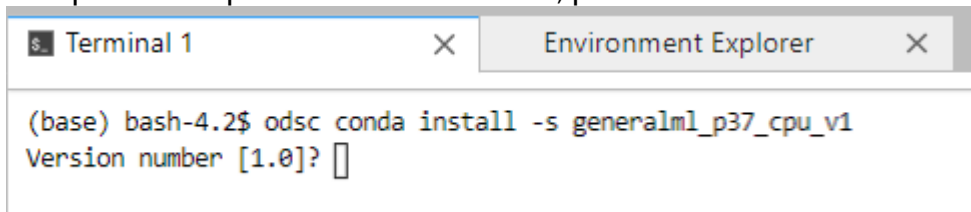


Pressionar no teclado **Ctrl+V**:



Aparecendo conforme acima, pressione **Enter** para instalar o Conda Environment selecionado.

Ao aparecer o questionamento abaixo, pressione **Enter** novamente:



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A instalação levará de 3 a 6 minutos, ao final aparecerá a mensagem conforme abaixo:

```
Terminal 1 x Environment Explorer x
Saving Notebooks: 31% [redacted] | 11/35 [00:00<00:01, 18.44it/s]
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/api_keys.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/autonomous_database.ipynb...
Saving Notebooks: 37% [redacted] | 13/35 [00:00<00:01, 14.47it/s]
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/binary_classification_attrition.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/class_weighting.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/classification_wine.ipynb...
Saving Notebooks: 46% [redacted] | 16/35 [00:00<00:01, 16.52it/s]
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/data_visualizations.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/datasetfactory_loading_data.ipynb...
Saving Notebooks: 51% [redacted] | 18/35 [00:01<00:01, 14.15it/s]
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/getting-started.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/mlx_ale.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/mlx_classification_attrition.ipynb...
Saving Notebooks: 60% [redacted] | 21/35 [00:01<00:00, 14.24it/s]
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/mlx_classification_wine.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/mlx_pdp_vs_ale.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/mlx_regression_diabetes.ipynb...
Saving Notebooks: 69% [redacted] | 24/35 [00:01<00:00, 16.84it/s]
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/mlx_whatif.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/model_catalog.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/model_deployment.ipynb...
Saving Notebooks: 77% [redacted] | 27/35 [00:01<00:00, 16.26it/s]
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/model_deployment_using_jobs.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/model_evaluation.ipynb...
Saving Notebooks: 83% [redacted] | 29/35 [00:01<00:00, 17.05it/s]
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/onnx.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/project.ipynb...
Saving Notebooks: 89% [redacted] | 31/35 [00:01<00:00, 15.89it/s]
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/pyod_classification_fraud.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/sqlmagic.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/transforming_data.ipynb...
INFO:ODSC:Notebook location /home/datascience/conda/notebooks/generalml_p37_cpu_v1/vault.ipynb...
Saving Notebooks: 100% [redacted] | 35/35 [00:01<00:00, 18.37it/s]
INFO:ODSC:Start to update the kernel name...
INFO:ODSC:Conda environment setup complete.
The environment setup is complete. To activate it for use in the terminal run `conda activate /home/datascience/conda/generalml_p37_cpu_v1`. It may take a few seconds for the kernel to appear in the JupyterLab launcher. To change the description of the environment, update /home/datascience/conda/generalml_p37_cpu_v1/*_manifest.yaml.
(base) bash-4.2$
```

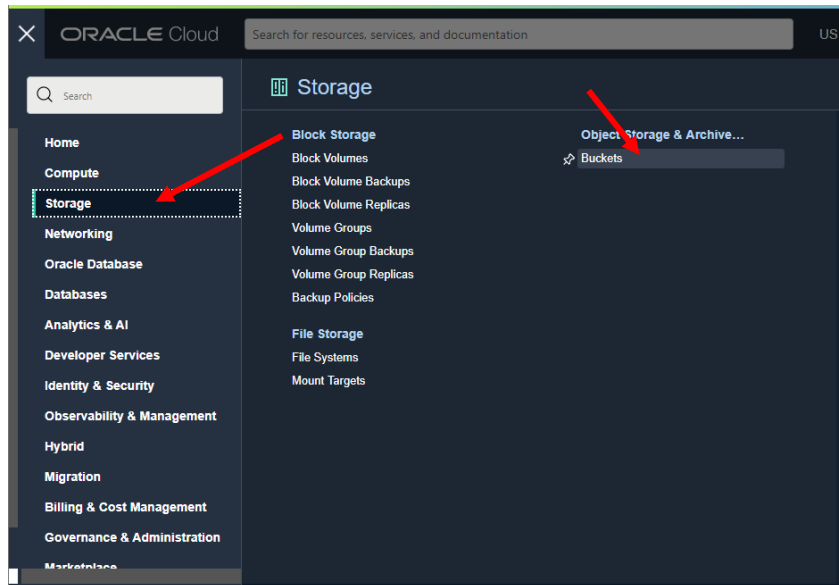

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Rodando script de Data Science com o Notebook Preditor_Locacao_v1.ipynb

Download, upload e execução do Script

Para realizar o download do arquivo, será necessário acessar o Object Storage chamado “raw-data”

Basta acessar o menu de “hamburger”, clicar em “Storage” e após em “Bucket”:



Após clicar no “Name” do bucket criado:

Object Storage & Archive
Storage

Buckets

List Scope

Compartment
DataAiFastTrack
demoth7 (root)/DataAiFastTrack

Tag filters
no tag filters applied

Buckets in DataAiFastTrack Compartment

Object Storage provides unlimited, high-performance, durable, and secure data storage. Data is uploaded as objects that are stored in buckets. [Learn more](#)

You can use 10 GiB of Object Storage and 10 GiB of Archive Storage for free in your home region. You are using approximately 150.63 MiB of combined Object Storage and Archive Storage. If you use more than 20 GiB and have not upgraded when your Free Trial ends, your data is deleted. [Show details](#)

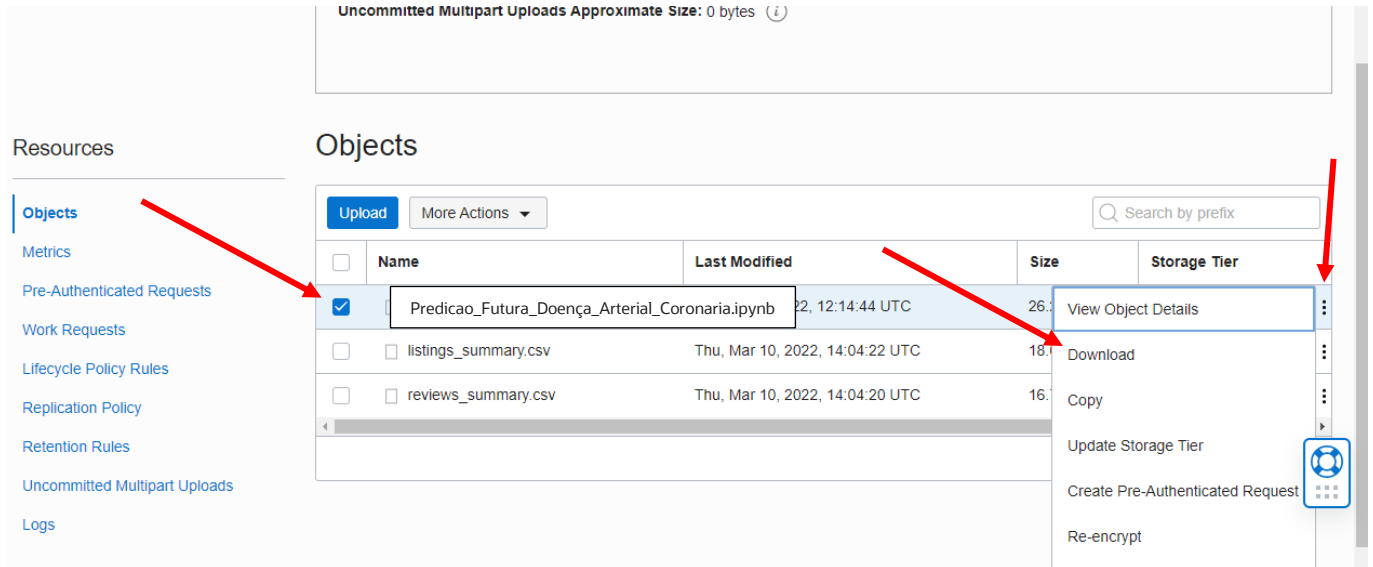
Create Bucket

Name	Default Storage Tier	Visibility	Created
ai-services	Standard	Public	Wed, Mar 9, 2022, 20:08:34 UTC
data-out	Standard	Private	Wed, Mar 9, 2022, 20:08:34 UTC
dataflow-app	Standard	Private	Wed, Mar 9, 2022, 20:08:35 UTC
dataflow-logs	Standard	Private	Wed, Mar 9, 2022, 20:08:34 UTC
raw-data	Standard	Private	Wed, Mar 9, 2022, 20:08:34 UTC

Showing 5 Items < 1 of 1 >

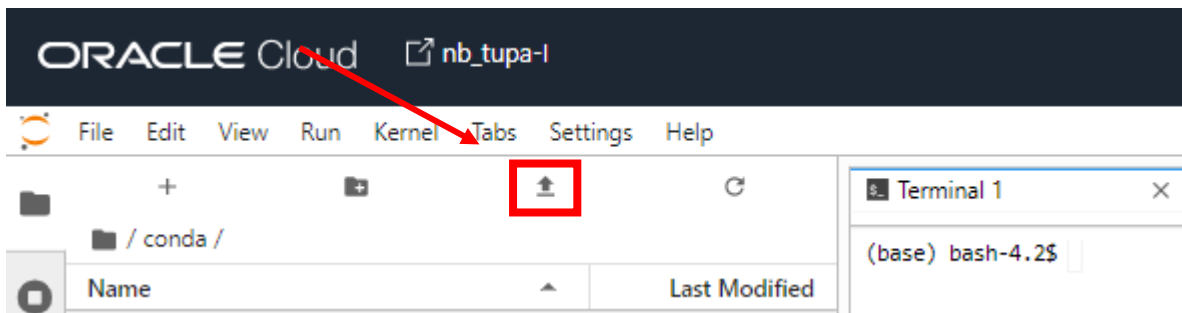
Na próxima tela, abaixar o cursor até o final, selecionar o arquivo “Predicao_Futura_Doenca_Arterial_Coronaria.ipynb”, clicar em nos três pontinhos na mesma linha do arquivo e por fim clicar em “Download”:

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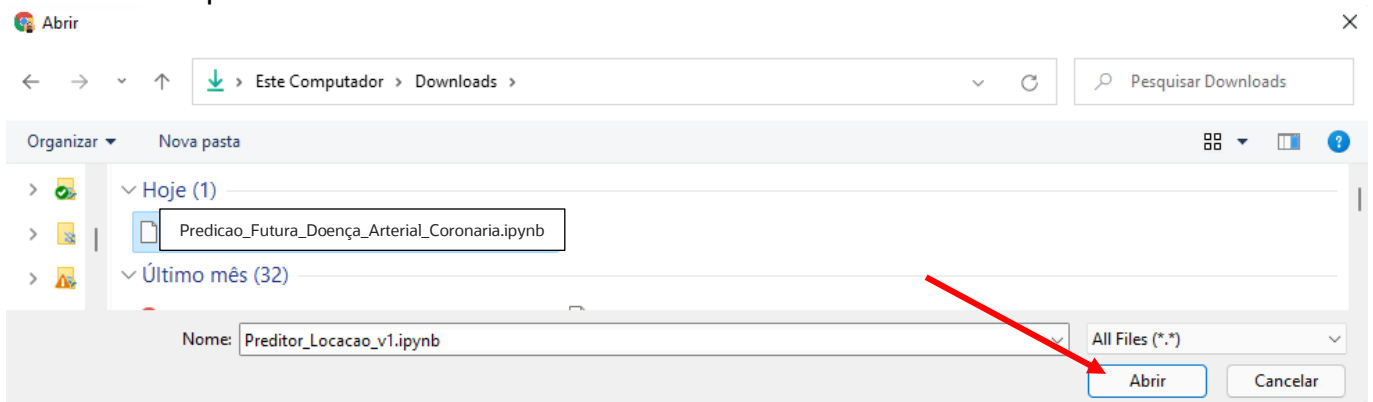


Pronto, o notebook está baixado na sua máquina!

Agora, retornando no notebook, precisaremos fazer o upload dele, para isto basta voltar no OCI Data Science e clicar no ícone de “upload”, conforme abaixo:

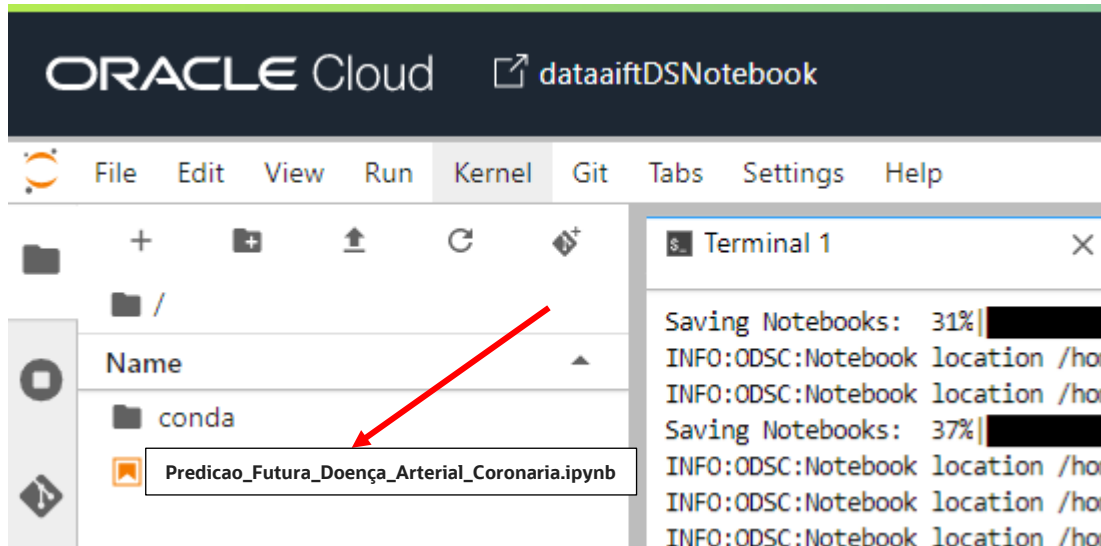


Ao abrir a janela abaixo, precisará navegar até a pasta onde o arquivo foi baixado, clicar duas vezes nele e após clicar em “Abrir”:

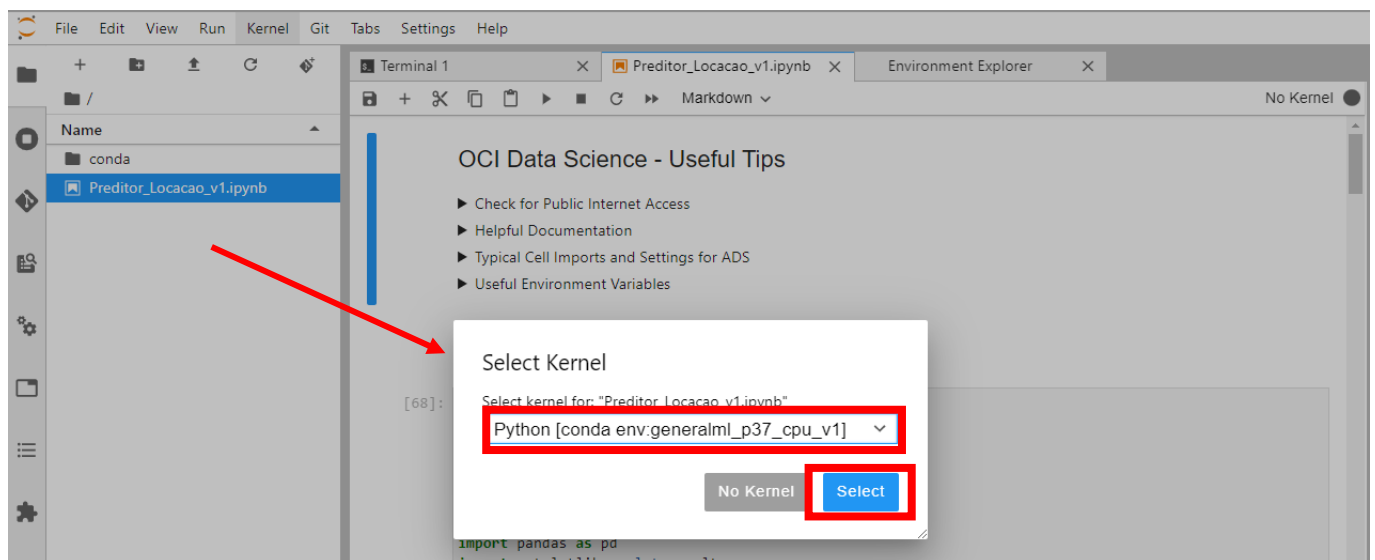


Após isto o arquivo aparecerá conforme abaixo, para abri-lo precisará clicar duas vezes nele:

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Abrirá uma caixa de opções para selecionar o Kernel, que deve ser o indicado abaixo, após selecionar clicar em “Select”:



E finalmente o notebook estará aberto e pronto para ser executado no OCI Data Science, **agora basta seguir as instruções contidas no mesmo!**