In [1]:	pip install autoviz  Collecting autoviz  Downloading autoviz-0.1.604-py3-none-any.whl (67 kB)
	Requirement already satisfied: seaborn>=0.11.1 in c:\users\kiit\anaconda3\lib\site-packages (from autoviz) (0.11.2) Requirement already satisfied: xlrd in c:\users\kiit\anaconda3\lib\site-packages (from autoviz) (7.31.1) Requirement already satisfied: hypthon in c:\users\kiit\anaconda3\lib\site-packages (from autoviz) (7.31.1) Requirement already satisfied: hyplot>=0.7.3 in c:\users\kiit\anaconda3\lib\site-packages (from autoviz) (0.8.0) Requirement already satisfied: fsspec>=0.8.3 in c:\users\kiit\anaconda3\lib\site-packages (from autoviz) (2022.7.1) Collecting xgboost>=0.82  Downloading xgboost-1.7.5-py3-none-win_amd64.whl (70.9 MB)
	Requirement already satisfied: PyYAML>=3.10 in c:\users\kiit\anaconda3\lib\site-packages (from bokeh>=2.4.2->autoviz) (6.0) Requirement already satisfied: tornado>=5.1 in c:\users\kiit\anaconda3\lib\site-packages (from bokeh>=2.4.2->autoviz) (6.1) Requirement already satisfied: Jinja2>=2.9 in c:\users\kiit\anaconda3\lib\site-packages (from bokeh>=2.4.2->autoviz) (2.11.3) Requirement already satisfied: pyviz-comms>=0.7.4 in c:\users\kiit\anaconda3\lib\site-packages (from holoviews-=1.14.9->autoviz) (2.0.2) Requirement already satisfied: param<2.0,>=1.9.3 in c:\users\kiit\anaconda3\lib\site-packages (from holoviews-=1.14.9->autoviz) (1.12.0) Requirement already satisfied: colorcet in c:\users\kiit\anaconda3\lib\site-packages (from holoviews-=1.14.9->autoviz) (3.0.0) Requirement already satisfied: pyparsing>=2.2.1 in c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3.3->autoviz) (3.0.9) Requirement already satisfied: pycler>=0.10 in c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3.3->autoviz) (0.11.0) Requirement already satisfied: pothorols>=4.22.0 in c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3.3->autoviz) (4.25.0) Requirement already satisfied: python-dateutil>=2.7 in c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3.3->autoviz) (4.25.0) Requirement already satisfied: kiwisolver>=1.0.1 in c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3.3->autoviz) (2.8.2) Requirement already satisfied: pyt>=2802.1 in c:\users\kiit\anaconda3\lib\site-packages (from pandas->autoviz) (2022.1) Requirement already satisfied: pyt>=2802.1 in c:\users\kiit\anaconda3\lib\site-packages (from panel>=0.12.6->autoviz) (2.8.1) Requirement already satisfied: markdown in c:\users\kiit\anaconda3\lib\site-packages (from panel>=0.12.6->autoviz) (3.3.4) Requirement already satisfied: tqdm>=4.48.0 in c:\users\kiit\anaconda3\lib\site-packages (from panel>=0.12.6->autoviz) (4.64.1) Requirement already satisfied: pyct>=0.4.4 in c:\users\kiit\anaconda3\lib\site-packages (from
	Requirement already satisfied: prompt-toolkit!=3.0.0,!=3.0.1,<3.1.0,>=2.0.0 in c:\users\kiit\anaconda3\lib\site-packages (from ipython->autoviz) (3.0.20)  Requirement already satisfied: traitlets>=4.2 in c:\users\kiit\anaconda3\lib\site-packages (from ipython->autoviz) (5.1.1)  Requirement already satisfied: pdi>=0.16 in c:\users\kiit\anaconda3\lib\site-packages (from ipython->autoviz) (0.18.1)  Requirement already satisfied: pygments in c:\users\kiit\anaconda3\lib\site-packages (from ipython->autoviz) (0.4.6)  Requirement already satisfied: colorama in c:\users\kiit\anaconda3\lib\site-packages (from ipython->autoviz) (0.4.6)  Requirement already satisfied: backcall in c:\users\kiit\anaconda3\lib\site-packages (from ipython->autoviz) (0.2.0)  Requirement already satisfied: matplotlib-inline in c:\users\kiit\anaconda3\lib\site-packages (from ipython->autoviz) (0.1.6)  Requirement already satisfied: decorator in c:\users\kiit\anaconda3\lib\site-packages (from jupython->autoviz) (0.1.6)  Requirement already satisfied: decorator in c:\users\kiit\anaconda3\lib\site-packages (from jupyter->autoviz) (5.1.1)  Requirement already satisfied: ipywidgets in c:\users\kiit\anaconda3\lib\site-packages (from jupyter->autoviz) (5.2.2)  Requirement already satisfied: ipykernel in c:\users\kiit\anaconda3\lib\site-packages (from jupyter->autoviz) (6.1.5)  Requirement already satisfied: ipykernel in c:\users\kiit\anaconda3\lib\site-packages (from jupyter->autoviz) (6.4.2)  Requirement already satisfied: notebook in c:\users\kiit\anaconda3\lib\site-packages (from jupyter->autoviz) (6.4.12)  Requirement already satisfied: notebook in c:\users\kiit\anaconda3\lib\site-packages (from nltk->autoviz) (6.4.2)  Requirement already satisfied: notebook in c:\users\kiit\anaconda3\lib\site-packages (from nltk->autoviz) (6.4.2)  Requirement already satisfied: regex>=2021.8.3 in c:\users\kiit\anaconda3\lib\site-packages (from nltk->autoviz) (6.922.7.9)  Requirement already satisfied: click in c:\users\kiit\anaconda3\lib\site-packages (from nltk->
	Requirement already satisfied: parso<0.9.9-0.8.0 in c:\users\kiit\anaconda3\lib\site-packages (from jedi>=0.16->ipython->autoviz) (0.8.3) Requirement already satisfied: MarkupSafe>=0.23 in c:\users\kiit\anaconda3\lib\site-packages (from Jinja2>=2.9->bokeh>=2.4.2->autoviz) (2.0.1) Requirement already satisfied: six in c:\users\kiit\anaconda3\lib\site-packages (from patsy>=0.5.2->statsmodels->autoviz) (1.16.0) Requirement already satisfied: wcwidth in c:\users\kiit\anaconda3\lib\site-packages (from prompt-toolkit!=3.0.0,!=3.0.1,<3.1.0,>=2.0.0->ipython->autoviz) (0.2.5) Requirement already satisfied: webencodings in c:\users\kiit\anaconda3\lib\site-packages (from bleach->panel>=0.12.6->autoviz) (0.5.1) Requirement already satisfied: jupyter-client>=6.1.12 in c:\users\kiit\anaconda3\lib\site-packages (from jpykernel->jupyter->autoviz) (7.3.4) Requirement already satisfied: pest-asyncio in c:\users\kiit\anaconda3\lib\site-packages (from jpykernel->jupyter->autoviz) (1.5.5) Requirement already satisfied: pyzmq>=17 in c:\users\kiit\anaconda3\lib\site-packages (from jpykernel->jupyter->autoviz) (23.2.0) Requirement already satisfied: psutil in c:\users\kiit\anaconda3\lib\site-packages (from ipykernel->jupyter->autoviz) (5.9.0) Requirement already satisfied: psutil in c:\users\kiit\anaconda3\lib\site-packages (from ipykernel->jupyter->autoviz) (5.9.0) Requirement already satisfied: psutil in c:\users\kiit\anaconda3\lib\site-packages (from ipywidgets->jupyter->autoviz) (0.2.0) Requirement already satisfied: pipython-genutils==0.2.0 in c:\users\kiit\anaconda3\lib\site-packages (from ipywidgets->jupyter->autoviz) (0.2.0) Requirement already satisfied: pipyterlab-pygments in c:\users\kiit\anaconda3\lib\site-packages (from pipywidgets->jupyter->autoviz) (0.1.0) Requirement already satisfied: pipyterlab-pygments in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert->jupyter->autoviz) (0.7.1) Requirement already satisfied: mistune<2,>=0.8.1 in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert->jupyter->autoviz)
	Requirement already satisfied: testpath in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert->jupyter->autoviz) (0.6.0) Requirement already satisfied: pandocfilters>=1.4.1 in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert->jupyter->autoviz) (1.5.0) Requirement already satisfied: nbclient<0.6.0,>=0.5.0 in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert->jupyter->autoviz) (0.5.13) Requirement already satisfied: jupyter-core in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert->jupyter->autoviz) (4.11.1) Requirement already satisfied: Send2Trash>=1.8.0 in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert->jupyter->autoviz) (1.8.0) Requirement already satisfied: argon2-cffi in c:\users\kiit\anaconda3\lib\site-packages (from notebook->jupyter->autoviz) (21.3.0) Requirement already satisfied: terminado>=0.8.3 in c:\users\kiit\anaconda3\lib\site-packages (from notebook->jupyter->autoviz) (0.13.1) Requirement already satisfied: prometheus-client in c:\users\kiit\anaconda3\lib\site-packages (from notebook->jupyter->autoviz) (0.14.1) Requirement already satisfied: prometheus-client in c:\users\kiit\anaconda3\lib\site-packages (from notebook->jupyter->autoviz) (0.14.1) Requirement already satisfied: certifi>=2017.4.17 in c:\users\kiit\anaconda3\lib\site-packages (from requests->panel>=0.12.6->autoviz) (2022.9.14) Requirement already satisfied: idna<4,>=2.5 in c:\users\kiit\anaconda3\lib\site-packages (from requests->panel>=0.12.6->autoviz) (3.3) Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\kiit\anaconda3\lib\site-packages (from requests->panel>=0.12.6->autoviz) (2.6-11) Requirement already satisfied: pywin32>=1.0 in c:\users\kiit\anaconda3\lib\site-packages (from nbformat>=4.2.0->ipywidgets->jupyter->autoviz) (4.16.0) Requirement already satisfied: fastjsonschema>=2.6 in c:\users\kiit\anaconda3\lib\site-packages (from nbformat>=4.2.0->ipywidgets->jupyter->autoviz) (2. Requirement already satisfied: pywinpty>=1.1.0 in c:\users\kiit\anaconda3\lib\site-packages
	Requirement already satisfied: argon2-cffi-bindings in c:\users\kiit\anaconda3\lib\site-packages (from argon2-cffi->notebook->jupyter->autoviz) (2 1.2.0)  Requirement already satisfied: soupsieve>1.2 in c:\users\kiit\anaconda3\lib\site-packages (from beautifulsoup4->nbconvert->jupyter->autoviz) (2.3. 1)  Requirement already satisfied: pyrsistent!=0.17.0,!=0.17.1,!=0.17.2,>=0.14.0 in c:\users\kiit\anaconda3\lib\site-packages (from jsonschema>=2.6->nb format>=4.2.0->ippydidgets->jupyter->autoviz) (0.18.0)  Requirement already satisfied: attrs>=17.4.0 in c:\users\kiit\anaconda3\lib\site-packages (from jsonschema>=2.6->nbformat>=4.2.0->ipywidgets->jupyter->autoviz) (21.4.0)  Requirement already satisfied: cffi>=1.0.1 in c:\users\kiit\anaconda3\lib\site-packages (from argon2-cffi-bindings->argon2-cffi->notebook->jupyter->autoviz) (1.15.1)  Requirement already satisfied: pycparser in c:\users\kiit\anaconda3\lib\site-packages (from cffi>=1.0.1->argon2-cffi-bindings->argon2-cffi->notebook->jupyter->autoviz) (2.21)  Building wheel for collected packages: emoji  Building wheel for collected packages: emoji  Building wheel for emoji (setup.py): started  Building wheel for emoji (setup.py): finished with status 'done'  Created wheel for emoji (setup.py): finished with status 'done'  Created wheel for emoji: filename=emoji-2.4.0-py2.py3-none-any.whl size=350810 sha256=16c8cebcleeaa04948d8d833ff444a5ecd7de377f6418b09f20fdc128fb  82216  Stored in directory: c:\users\kiit\appdata\loca\lpip\cache\wheels\d5\c5\45\6c3b2e538c10e9667495d6bff243ee0a296c3c246478007df3  Successfully built emoji  Installing collected packages: emoji, xgboost, pyamg, textblob, holoviews, autoviz  Attempting uninstall: holoviews  Found existing installation: holoviews 1.15.0
In [2]:	Uninstalling holoviews-1.15.0: Successfully uninstalled holoviews-1.15.0 Successfully installed autoviz-0.1.604 emoji-2.4.0 holoviews-1.14.9 pyamg-5.0.0 textblob-0.17.1 xgboost-1.7.5 Note: you may need to restart the kernel to use updated packages.  pip install pycaret  Collecting pycaret  Downloading pycaret-3.0.2-py3-none-any.whl (483 kB)
	Collecting imbalanced_learn>=0.8.1  Downloading imbalanced_learn>=0.10.1-py3-none-any.whl (226 kB)
	Requirement already satisfied: statsmodels>=0.12.1 in c:\users\kiit\anaconda3\lib\site-packages (from pycaret) (0.13.2)  Collecting kaleido>=0.2.1  Downloading kaleido-0.2.1-py2.py3-none-win_amd64.whl (65.9 MB)
	Collecting joblib=1.2.0  Using cached joblib-1.2.0-py3-none-any.whl (297 kB)  Collecting tbats=1.1.3  Downloading tbats-1.1.3-py3-none-any.whl (44 kB)
	Requirement already satisfied: decorator in c:\users\kiit\anaconda3\lib\site-packages (from ipython>=5.5.0->pycaret) (5.1.1) Requirement already satisfied: setuptools>=18.5 in c:\users\kiit\anaconda3\lib\site-packages (from ipython>=5.5.0->pycaret) (63.4.1) Requirement already satisfied: jedi>=0.16 in c:\users\kiit\anaconda3\lib\site-packages (from ipython>=5.5.0->pycaret) (0.18.1) Requirement already satisfied: matplotlib-inline in c:\users\kiit\anaconda3\lib\site-packages (from ipython>=5.5.0->pycaret) (0.1.6) Requirement already satisfied: pygments in c:\users\kiit\anaconda3\lib\site-packages (from ipython>=5.5.0->pycaret) (0.1.6) Requirement already satisfied: pygments in c:\users\kiit\anaconda3\lib\site-packages (from ipython>=5.5.0->pycaret) (0.7.5) Requirement already satisfied: traitlets>=4.2 in c:\users\kiit\anaconda3\lib\site-packages (from ipython>=5.5.0->pycaret) (0.7.5) Requirement already satisfied: backcall in c:\users\kiit\anaconda3\lib\site-packages (from ipython>=5.5.0->pycaret) (0.2.0) Requirement already satisfied: ipython-genutils-=0.2.0 in c:\users\kiit\anaconda3\lib\site-packages (from ipython>=5.5.0->pycaret) (0.2.0) Requirement already satisfied: jupyterlab-widgets>=1.0.0 in c:\users\kiit\anaconda3\lib\site-packages (from ipywidgets>=7.6.5->pycaret) (0.2.0) Requirement already satisfied: jupyterlab-widgets>=1.0.0 in c:\users\kiit\anaconda3\lib\site-packages (from ipywidgets>=7.6.5->pycaret) (1.0.0) Requirement already satisfied: widgetsnbextension-=3.5.0 in c:\users\kiit\anaconda3\lib\site-packages (from ipywidgets>=7.6.5->pycaret) (0.15.2) Requirement already satisfied: widgetsnbextension-=3.5.0 in c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3.0->pycaret) (0.37.1) Requirement already satisfied: pycler>=0.10 in c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3.0->pycaret) (0.2.0) Requirement already satisfied: python-dateutil>=2.7 in c:\users\kiit\anaconda3\lib\site-packages (from matplotlib>=3.3.0->pycaret) (2.8.2) Requirement already satisfied: python-d
	Requirement already satisfied: jupyter_core in c:\users\kiit\anaconda3\lib\site-packages (from nbformat>=4.2.0->pycaret) (4.11.1) Requirement already satisfied: fastjsonschema in c:\users\kiit\anaconda3\lib\site-packages (from nbformat>=4.2.0->pycaret) (2.16.2) Requirement already satisfied: llvmlite<0.39,>=0.38.0rc1 in c:\users\kiit\anaconda3\lib\site-packages (from nbformat>=4.2.0->pycaret) (0.38.0) Requirement already satisfied: pytz>=2020.1 in c:\users\kiit\anaconda3\lib\site-packages (from pandas<2.0.0,>=1.3.0->pycaret) (2022.1) Requirement already satisfied: tenacity>=6.2.0 in c:\users\kiit\anaconda3\lib\site-packages (from pandas<2.0.0,>=1.3.0->pycaret) (2022.1) Requirement already satisfied: tenacity>=6.2.0 in c:\users\kiit\anaconda3\lib\site-packages (from plotly>=5.0.0->pycaret) (8.0.1) Collecting dash<3.0.0,>=2.2.0  Downloading dash<2.10.1-py3-none-any.whl (10.3 MB)
	Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\kiit\anaconda3\lib\site-packages (from requests>=2.27.1->pycaret) (2.0.4) Requirement already satisfied: idna<4,>=2.5 in c:\users\kiit\anaconda3\lib\site-packages (from requests>=2.27.1->pycaret) (3.3)  Collecting deprecated>=1.2.13
	Requirement already satisfied: tornado>=6.1 in c:\users\kiit\anaconda3\lib\site-packages (from ipykernel>=4.5.1->ipywidgets>=7.6.5->pycaret) (6.1) Requirement already satisfied: pyzmq>=17 in c:\users\kiit\anaconda3\lib\site-packages (from ipykernel>=4.5.1->ipywidgets>=7.6.5->pycaret) (23.2.0) Requirement already satisfied: nest-asyncio in c:\users\kiit\anaconda3\lib\site-packages (from ipykernel>=4.5.1->ipywidgets>=7.6.5->pycaret) (1.5.5) Requirement already satisfied: parso<0.9.0,>=0.8.0 in c:\users\kiit\anaconda3\lib\site-packages (from jedi>=0.16->ipython>=5.5.0->pycaret) (0.8.3) Requirement already satisfied: pyrsistent!=0.17.0,!=0.17.1,!=0.17.2,>=0.14.0 in c:\users\kiit\anaconda3\lib\site-packages (from jsonschema>=2.6->nb format>=4.2.0->pycaret) (0.18.0) Requirement already satisfied: attrs>=17.4.0 in c:\users\kiit\anaconda3\lib\site-packages (from jsonschema>=2.6->nbformat>=4.2.0->pycaret) (21.4.0) Collecting ansi2html  Downloading ansi2html-1.8.0-py3-none-any.whl (16 kB) Collecting retrying Downloading retrying-1.3.4-py3-none-any.whl (11 kB) Requirement already satisfied: wcwidth in c:\users\kiit\anaconda3\lib\site-packages (from prompt-toolkit!=3.0.0,!=3.0.1,<3.1.0,>=2.0.0->ipython>=5.5.0->pycaret) (0.2.5) Requirement already satisfied: notebook>=4.4.1 in c:\users\kiit\anaconda3\lib\site-packages (from jupyter_core->nbformat>=4.2.0->pycaret) (302) Requirement already satisfied: pywin32>=1.0 in c:\users\kiit\anaconda3\lib\site-packages (from Flask<=2.2.3,>=1.0.4->dash<3.0.0,>=2.2.0->plotly-resam pler>=0.8.3.1->pycaret) (8.0.4)
	Requirement already satisfied: itsdangerous>=0.24 in c:\users\kiit\anaconda3\lib\site-packages (from Flask<=2.2.3,>=1.0.4->dash<3.0.0,>=2.2.0->plot ly-resampler>=0.8.3.1->pycaret) (2.0.1) Requirement already satisfied: entrypoints in c:\users\kiit\anaconda3\lib\site-packages (from jupyter-client>=6.1.12->ipykernel>=4.5.1->ipywidgets>=7.6.5->pycaret) (0.4) Requirement already satisfied: terminado>=0.8.3 in c:\users\kiit\anaconda3\lib\site-packages (from notebook>=4.4.1->widgetsnbextension-=3.5.0->ipywidgets>=7.6.5->pycaret) (0.13.1) Requirement already satisfied: prometheus-client in c:\users\kiit\anaconda3\lib\site-packages (from notebook>=4.4.1->widgetsnbextension-=3.5.0->ipywidgets>=7.6.5->pycaret) (0.14.1) Requirement already satisfied: argon2-cffi in c:\users\kiit\anaconda3\lib\site-packages (from notebook>=4.4.1->widgetsnbextension-=3.5.0->ipywidget s>=7.6.5->pycaret) (21.3.0) Requirement already satisfied: nbconvert>=5 in c:\users\kiit\anaconda3\lib\site-packages (from notebook>=4.4.1->widgetsnbextension-=3.5.0->ipywidget ts>=7.6.5->pycaret) (6.4.4) Requirement already satisfied: Send2Trash>=1.8.0 in c:\users\kiit\anaconda3\lib\site-packages (from notebook>=4.4.1->widgetsnbextension-=3.5.0->ipywidgets>=7.6.5->pycaret) (1.8.0) Requirement already satisfied: defusedxml in c:\users\kiit\anaconda3\lib\site-packages (from notebook>=4.4.1->widgetsnbextension-=3.5.0->ipywidgets>=7.6.5->pycaret) (0.7.1) Requirement already satisfied: jupyterlab-pygments in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert>=5->notebook>=4.4.1->widgetsnbextension-=3.5.0->ipywidgets>=7.6.5->pycaret) (0.1.2) Requirement already satisfied: nbclient<0.6.0,>=0.5.0 in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert>=5->notebook>=4.4.1->widgetsnbextension-=3.5.0->ipywidgets>=7.6.5->pycaret) (0.1.2)
	tension=3.5.0->ipywidgets>=7.6.5->pycaret) (0.5.13) Requirement already satisfied: bleach in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert>=5->notebook>=4.4.1->widgetsnbextension=3.5.0-> ipywidgets>=7.6.5->pycaret) (4.1.0) Requirement already satisfied: pandocfilters>=1.4.1 in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert>=5->notebook>=4.4.1->widgetsnbextension=3.5.0->ipywidgets>=7.6.5->pycaret) (1.5.0) Requirement already satisfied: beautifulsoup4 in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert>=5->notebook>=4.4.1->widgetsnbextension=3.5.0->ipywidgets>=7.6.5->pycaret) (4.11.1) Requirement already satisfied: testpath in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert>=5->notebook>=4.4.1->widgetsnbextension=3.5.0->ipywidgets>=7.6.5->pycaret) (0.6.0) Requirement already satisfied: mistune<2,>=0.8.1 in c:\users\kiit\anaconda3\lib\site-packages (from nbconvert>=5->notebook>=4.4.1->widgetsnbextension=3.5.0->ipywidgets>=7.6.5->pycaret) (0.8.4) Requirement already satisfied: pywinpty>=1.1.0 in c:\users\kiit\anaconda3\lib\site-packages (from terminado>=0.8.3->notebook>=4.4.1->widgetsnbextension=3.5.0->ipywidgets>=7.6.5->pycaret) (2.0.2) Requirement already satisfied: argon2-cffi-bindings in c:\users\kiit\anaconda3\lib\site-packages (from argon2-cffi->notebook>=4.4.1->widgetsnbextension=3.5.0->ipywidgets>=7.6.5->pycaret) (21.2.0) Requirement already satisfied: cffi>=1.0.1 in c:\users\kiit\anaconda3\lib\site-packages (from beautifulsoup4->nbconvert>=5->notebook>=4.4.1->widgetsnbextension=3.5.0->ipywidgets>=7.6.5->pycaret) (21.2.0) Requirement already satisfied: soupsieve>1.2 in c:\users\kiit\anaconda3\lib\site-packages (from beautifulsoup4->nbconvert>=5->notebook>=4.4.1->widgetsnbextension=3.5.0->ipywidgets>=7.6.5->pycaret) (2.3.1) Requirement already satisfied: webencodings in c:\users\kiit\anaconda3\lib\site-packages (from bleach->nbconvert>=5->notebook>=4.4.1->widgetsnbextension=3.5.0->ipywidgets>=7.6.5->pycaret) (2.3.1)
	nsion=3.5.0->ipywidgets>=7.6.5->pycaret) (0.5.1) Requirement already satisfied: pycparser in c:\users\kiit\anaconda3\lib\site-packages (from cffi>=1.0.1->argon2-cffi-bindings->argon2-cffi->noteboo k>=4.4.1->widgetsnbextension=3.5.0->ipywidgets>=7.6.5->pycaret) (2.21) Building wheel for collected packages: plotly-resampler, pyod Building wheel for plotly-resampler (pyproject.toml): started Building wheel for plotly-resampler (pyproject.toml): finished with status 'done' Created wheel for plotly-resampler: filename=plotly_resampler-0.8.3.2-cp39-cp39-win_amd64.whl size=47899 sha256=7fa4234c9d25c965b412c34e1c10b0676 7cf67a98118aa379805e96715a1bd5a Stored in directory: c:\users\kiit\appdata\local\pip\cache\wheels\9e\36\06\4c11e300918011376af149098621ec7ebe06d8256566d43d51 Building wheel for pyod (setup.py): started Building wheel for pyod (setup.py): finished with status 'done' Created wheel for pyod: filename=pyod-1.0.9-py3-none-any.whl size=184095 sha256=beb79886754e50976ba6934cda37e607ca209d71ac0f86ce8147d87fbd71ca25 Stored in directory: c:\users\kiit\appdata\local\pip\cache\wheels\lb\9c\b8\9759d7cc64a1e01bb9872ade80cb7db445ccf506e083325106 Successfully built plotly-resampler pyod Installing collected packages: trace-updater, kaleido, dash-table, dash-html-components, dash-core-components, xxhash, schemdraw, retrying, orjson, joblib, importlib-metadata, deprecated, ansi2html, deprecation, yellowbrick, sktime, scikit-plot, pyod, lightgbm, imbalanced-learn, dash, pmdarima, jupyter-dash, category-encoders, tbats, plotly-resampler, pycaret Attempting uninstall: joblib Found existing installation: joblib 1.1.0
In [4]:	Uninstalling joblib-1.1.0:     Successfully uninstall: importlib-metadata     Found existing installation: importlib-metadata 4.11.3     Uninstalling importlib-metadata-4.11.3:     Successfully uninstalled importlib-metadata-4.11.3  Successfully installed ansi2html-1.8.0 category-encoders-2.6.1 dash-2.10.1 dash-core-components-2.0.0 dash-html-components-2.0.0 dash-table-5.0.0 d eprecated-1.2.14 deprecation-2.1.0 imbalanced-learn-0.10.1 importlib-metadata-6.6.0 joblib-1.2.0 jupyter-dash-0.4.2 kaleido-0.2.1 lightgbm-3.3.5 or json-3.8.14 plotly-resampler-0.8.3.2 pmdarima-2.0.3 pycaret-3.0.2 pyod-1.0.9 retrying-1.3.4 schemdraw-0.15 scikit-plot-0.3.7 sktime-0.17.0 tbats-1.1.3 trace-updater-0.0.9.1 xxhash-3.2.0 yellowbrick-1.5  Note: you may need to restart the kernel to use updated packages.  import numpy as np import pandas as pd  import matplotlib.pyplot as plt import seaborn as sns  from sklearn.model_selection import train_test_split from sklearn import metrics
	<pre>from scipy import stats from autoviz.classify_method import data_cleaning_suggestions ,data_suggestions from pycaret.regression import *  Imported v0.1.604. After importing, execute '%matplotlib inline' to display charts in Jupyter.     AV = AutoViz_Class()     dfte = AV.AutoViz_filename, sep=',', depVar='', dfte=None, header=0, verbose=1, lowess=False,</pre>
In [5]: Out[5]:	Unnamed: 0         TV         Radio         Newspaper         Sales           0         1         230.1         37.8         69.2         22.1           1         2         44.5         39.3         45.1         10.4           2         3         17.2         45.9         69.3         9.3           3         4         151.5         41.3         58.5         18.5           4         5         180.8         10.8         58.4         12.9
In [6]:	195
In [7]: In [8]: Out[8]:	TV Radio Newspaper Sales  0 230.1 37.8 69.2 22.1  1 44.5 39.3 45.1 10.4  2 17.2 45.9 69.3 9.3  3 151.5 41.3 58.5 18.5  4 180.8 10.8 58.4 12.9
<pre>In [9]:     Out[9]:     In [10]:     Out[10]:</pre>	(200, 4)
In [13]: Out[13]:	Count         200.000000         200.000000         200.000000         200.000000         200.000000           mean         147.042500         23.264000         30.554000         14.022500           std         85.854236         14.846809         21.778621         5.217457           min         0.700000         0.000000         0.300000         1.600000           50%         74.375000         9.975000         12.750000         10.375000           50%         149.750000         22.900000         25.750000         12.900000           75%         218.825000         36.525000         45.100000         17.400000
In [14]:	300 250 200 ≥ 150 100 50
	50 40 20 10 0
	20 20 25 20 10
In [24]: Out[24]:	fig, axs= plt.subplots(1,3,sharey=True) df.plot(kind="scatter",x='TV',y='Sales',ax=axs[0],figsize=(15,12),color="Red") df.plot(kind="scatter",x='Radio',y='Sales',ax=axs[1],figsize=(15,12),color="Green") df.plot(kind="scatter",x='Newspaper',y='Sales',ax=axs[2],figsize=(15,12))  *c* argument looks like a single numeric RGB or RGBA sequence, which should be avoided as value-mapping will have precedence in case its length mat ches with *x* & *y*. Please use the *color* keyword-argument or provide a 2D array with a single row if you intend to specify the same RGB or RGBA value for all points. <axessubplot:xlabel='newspaper', ylabel="Sales"></axessubplot:xlabel='newspaper',>
In [38]:	d = setup(data=df, target='Sales', session_id=100)    Description   Value     O Session id   100     1 Target   Sales     2 Target type   Regression
	3 Original data shape (200, 4) 4 Transformed data shape (200, 4) 5 Transformed train set shape (60, 4) 6 Transformed test set shape (60, 4) 7 Numeric features 3 8 Preprocess True 9 Imputation type simple 10 Numeric imputation mean 11 Categorical imputation mode 12 Fold Generator KFold 13 Fold Number 10 14 CPU Jobs -1
In [39]:	15  Use GPU False 16  Log Experiment False 17  Experiment Name reg-default-name 18  USI 6370  Compare_models()  Model MAE MSE RMSE R2 RMSLE MAPE TT (Sec) et Extra Trees Regressor 0.4363 0.4289 0.5880 0.9872 0.0659 0.0578 0.2450 gbr Gradient Boosting Regressor 0.6159 0.7554 0.8195 0.9758 0.0803 0.0714 0.1990 rf Random Forest Regressor 0.6488 0.8025 0.8543 0.9735 0.0830 0.0726 0.2820 xgboost Extreme Gradient Boosting 0.6702 0.8607 0.8918 0.9714 0.0837 0.0720 0.2110
	ada         AdaBoost Regressor         0.9495         1.5461         1.2029         0.9478         0.1043         0.1017         0.1840           dt         Decision Tree Regressor         0.8743         1.4253         1.1720         0.9435         0.1032         0.0868         0.0420           lightgbm         Light Gradient Boosting Machine         0.9259         1.8540         1.2775         0.9419         0.1304         0.1151         0.5650           knn         K Neighbors Regressor         1.2804         3.0706         1.6868         0.8905         0.1304         0.1227         0.0490           lasso         Lasso Regression         1.4595         3.6025         1.8238         0.8742         0.1755         0.1689         0.0520           en         Elastic Net         1.4617         3.6153         1.8262         0.8740         0.1768         0.1700         0.0600           lar         Least Angle Regression         1.4634         3.6301         1.8285         0.8739         0.1785         0.1713         0.0840           ridge         Ridge Regression         1.4657         3.6354         1.8306         0.8736         0.1777         0.1709         0.0810           huber         Huber Regressor
Out[39]: In [40]:	dummy       Dummy Regressor       4.5121       30.4512       5.4155       -0.0553       0.3883       0.4449       0.0860         par       Passive Aggressive Regressor       5.6957       69.4698       6.5374       -2.5942       0.3769       0.4366       0.0710         Processing: 0%
In [41]: Out[41]:	<pre>best_fit Pipeline(memory=FastMemory(location=C:\Users\KIIT\AppData\Local\Temp\joblib),</pre>
Out[41]:  In [42]:  In [43]:	<pre>steps=[('numerical_imputer',</pre>
In [44]: In [45]: In [46]: Out[61]:	<pre>from sklearn.preprocessing import OneHotEncoder, StandardScaler,OrdinalEncoder from sklearn.compose import make_column_transformer from sklearn.pipeline import make_pipeline from sklearn.metrics import r2_score  column_trans=make_column_transformer((OneHotEncoder(sparse=False),[]),remainder='passthrough') scaler=StandardScaler() oe=OrdinalEncoder()  from sklearn.ensemble import ExtraTreesRegressor e=ExtraTreesRegressor(n_estimators=100,random_state=0) pipe=make_pipeline(column_trans,scaler,e) pipe.fit(x_train,y_train) y_pred_r=pipe.predict(x_test) r2_score(y_test,y_pred_r) a_gggs1627gggs1040</pre>
<pre>In [59]: Out[59]: In [64]: Out[64]: In [62]: Out[62]: In [63]: Out[63]:</pre>	<pre>pipe.predict([[283.6,42.0,66.2]]) #Original ans 25.5 array([25.5])  pipe.predict([[109.8,47.8,51.4]]) #Original ans 16.7 array([16.7])  pipe.predict([[17.2,45.9,69.3]]) #Original ans 9.3 array([9.3])  pipe.predict([[227.2,15.8,49.9]]) #Original ans 14.8 array([14.8])</pre>
In [ ]:	