

A screenshot of a Windows desktop environment. In the foreground, there is a code editor window titled 'cars.py'. The code inside the window is a Python script named 'cars.py'. It defines a function 'make\_car' that takes 'manufacturer' and 'model' as required parameters and an arbitrary number of key-value pairs as optional parameters. The script then prints three instances of the 'car' class: 'car1' (Subaru Outback), 'car2' (Tesla Model 3), and 'car3' (Ford Mustang). The code editor interface includes tabs for other files like 'favorite\_places.py', 'movie\_tickets.py', 'dell\_sandwiches.py', and 'cities.py'. At the bottom of the code editor, it shows 'In 23, Col 12 752 characters' and 'Plain text'. The status bar at the bottom right indicates '100%', 'Windows (CRU)', 'UTF-8', '6:18 PM', and '2/22/2026'.

```
# 8-14. Cars
# This program defines a function that stores car information in a dictionary

def make_car(manufacturer, model, **options):
    """Return a dictionary representing a car with arbitrary info."""
    car_info = {
        "manufacturer": manufacturer,
        "model": model
    }
    # Add any additional key-value pairs
    for key, value in options.items():
        car_info[key] = value
    return car_info

# Call the function with required info and extra options
car1 = make_car('subaru', 'outback', color='blue', tow_package=True)
car2 = make_car('tesla', 'model 3', color='red', autopilot=True)
car3 = make_car('ford', 'mustang', color='black', convertible=True)

# Print the dictionaries to check
print(car1)
print(car2)
print(car3)]
```

A screenshot of a Windows desktop environment. In the foreground, there is a command prompt window titled 'Command Prompt'. The command prompt shows the user's directory as 'C:\Users\oneal' and the command entered as 'python cars.py'. The output of the command is displayed, showing the creation of three car objects: 'car1' (Subaru Outback), 'car2' (Tesla Model 3), and 'car3' (Ford Mustang) with their respective details. The command prompt interface includes a title bar 'Command Prompt' and a status bar at the bottom right showing '6:18 PM' and '2/22/2026'. The desktop background and taskbar are visible in the background.

```
C:\ Command Prompt X + v
Microsoft Windows [Version 10.0.26200.7840]
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C:\Users\oneal>cd Desktop
C:\Users\oneal\Desktop>notepad cars.py
C:\Users\oneal\Desktop>python cars.py
{'manufacturer': 'subaru', 'model': 'outback', 'color': 'blue', 'tow_package': True}
{'manufacturer': 'tesla', 'model': 'model 3', 'color': 'red', 'autopilot': True}
{'manufacturer': 'ford', 'model': 'mustang', 'color': 'black', 'convertible': True}

C:\Users\oneal\Desktop>
```