

Tarun Saraswat – Nile project

```
from nile import get_distance, format_price, SHIPPING_PRICES
from test import test_function

def calculate_shipping_cost(from_coords,to_coords,shipping_type='Overnight'):
    #unpacking the tuples
    from_lat, from_long = from_coords
    to_lat, to_long = to_coords
    #one way to calculate the distance:
    # distance = get_distance(from_lat,from_long,to_lat,to_long)
    #another way to calculate the distance:
    distance = get_distance(*from_coords,*to_coords)
    #fetching the key passed in the dictionary
    shipping_rate = SHIPPING_PRICES[shipping_type]
    price = distance * shipping_rate
    #returning the formatted price
    return format_price(price)

# Test the function by calling:
test_function(calculate_shipping_cost)

# This function calculates the drivers cost
def calculate_driver_cost(distance,*drivers):
    cheapest_driver = None
    cheapest_driver_price = None
    for driver in drivers:
        driver_time = driver.speed * distance
        price_for_driver = driver.salary * driver_time
    #checking if the current driver is the cheapest one
    if cheapest_driver is None:
        cheapest_driver = driver
        cheapest_driver_price = price_for_driver
    #checking if the cheapest driver is the one stored in cheapest_driver
    elif price_for_driver < cheapest_driver_price:
        cheapest_driver = driver
```

```
cheapest_driver_price = price_for_driver
return cheapest_driver_price, cheapest_driver

# Test the function by calling
test_function(calculate_driver_cost)
```

```
# This function calculates the amount of money made, with keyword arguments passed into
it.
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```
def calculate_money_made(**trips):
    total_money_made = 0
    #iterating through the dictionary
    for trip_id, trip in trips.items():
        trip_revenue = trip.cost - trip.driver.cost
        total_money_made += trip_revenue
    return total_money_made
```

```
# Test the function by calling
test_function(calculate_money_made)
```

The screenshot displays the Codecademy IDE interface. On the left, a sidebar shows the course 'LEARN INTERMEDIATE PYTHON 3' with a section titled 'The Nile'. The main area is divided into three panes. The left pane shows the 'Objective' and 'Tasks' (23/23 Complete). The central pane is a code editor with three files: 'script.py', 'nile.py', and 'test.py'. The 'nile.py' file contains the following Python code:

```
1 from nile import get_distance, format_price, SHIPPING_PRICES
2 from test import test_function
3
4 def calculate_shipping_cost(from_coords, to_coords,
5                             shipping_type='Overnight'):
6     #unpacking the tuples
7     from_lat, from_long = from_coords
8     to_lat, to_long = to_coords
9     #one way to calculate the distance:
10    # distance = get_distance(from_lat, from_long, to_lat, to_long)
11    #another way to calculate the distance:
12    distance = get_distance(*from_coords, *to_coords)
13    #unpacking the key passed in the dictionary
14    shipping_rate = SHIPPING_PRICES[shipping_type]
15    return distance * shipping_rate
```

The right pane shows the test results:

```
OK! calculate_shipping_cost() passes tests
OK! calculate_driver_cost() passes tests
OK! calculate_money_made() passes tests
```

At the bottom of the IDE, there is a status bar showing '23/23 Complete' and buttons for 'Back' and 'Next'.