Untitled-6

```
# List of friends' names
friends_names = ["Alice", "Bob", "Charlie", "Diana", "Eve"]

# Create a list of tuples with each friend's name and the length of the name
friends_tuples = [(name, len(name)) for name in friends_names]

# Print the list of tuples
print(friends_tuples)

```

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```python
def calculate_total_expenses(expenses):
    """
    Calculate the total expenses from a dictionary.

    :param expenses: Dictionary with expense categories and amounts
    :return: Total expenses
    """
    return sum(expenses.values())

def find_significant_difference(expenses1, expenses2):
    """
    Find the category with the most significant difference in spending.

    :param expenses1: Dictionary with first set of expenses
    :param expenses2: Dictionary with second set of expenses
    :return: Tuple containing the category with the largest difference and the difference amount
    """
    categories = set(expenses1.keys()).union(set(expenses2.keys()))
    max_diff = 0
    significant_category = None

    for category in categories:
        amount1 = expenses1.get(category, 0)
        amount2 = expenses2.get(category, 0)
        diff = abs(amount1 - amount2)

        if diff > max_diff:
            max_diff = diff
            significant_category = category

    return significant_category, max_diff

def main():
    # Dictionaries for expenses
    your_expenses = {
        "Hotel": 1200,
        "Food": 800,
        "Transportation": 500,
        "Attractions": 300,
        "Miscellaneous": 200
    }

    partner_expenses = {
        "Hotel": 1000,
        "Food": 900,
        "Transportation": 600,
        "Attractions": 400,
        "Miscellaneous": 150
```

```
    }

    # Calculate total expenses
    your_total = calculate_total_expenses(your_expenses)
    partner_total = calculate_total_expenses(partner_expenses)

    # Print total expenses
    print(f"Your total expenses: ${your_total}")
    print(f"Your partner's total expenses: ${partner_total}")

    # Determine who spent more
    if your_total > partner_total:
        print("You spent more money overall.")
    elif your_total < partner_total:
        print("Your partner spent more money overall.")
    else:
        print("Both spent the same amount overall.")

    # Find and print the category with the significant difference
    category, difference = find_significant_difference(your_expenses, partner_expenses)
    print(f"The category with the most significant difference is '{category}' with a difference
of ${difference}.")

if __name__ == "__main__":
    main()

```