Adejoba.py

```python
def compute_tax(status, income):
    # Tax brackets for 2009
    brackets = {
        0: [  # Single
            (8350, 0.10),
            (33950, 0.15),
            (82250, 0.25),
            (171550, 0.28),
            (372950, 0.33),
            (float('inf'), 0.35)
        ],
        1: [  # Married Filing Jointly or Qualifying Widow(er)
            (16700, 0.10),
            (67900, 0.15),
            (137050, 0.25),
            (208850, 0.28),
            (372950, 0.33),
            (float('inf'), 0.35)
        ],
        2: [  # Married Filing Separately
            (8350, 0.10),
            (33950, 0.15),
            (68525, 0.25),
            (104425, 0.28),
```

```python
        (186475, 0.33),
        (float('inf'), 0.35)
    ],
    3: [  # Head of Household
        (11950, 0.10),
        (45500, 0.15),
        (117450, 0.25),
        (190200, 0.28),
        (372950, 0.33),
        (float('inf'), 0.35)
    ]
}


tax = 0.0
previous_limit = 0


for limit, rate in brackets[status]:
    if income > limit:
        tax += (limit - previous_limit) * rate
    else:
        tax += (income - previous_limit) * rate
        break
    previous_limit = limit


return tax
```

```python
def main():
    print("U.S. Federal Personal Income Tax Calculator (2009)")
    print("=" * 50)

    # Display filing status options
    print("\nFiling Status:")
    print("0 - Single")
    print("1 - Married Filing Jointly or Qualifying Widow(er)")
    print("2 - Married Filing Separately")
    print("3 - Head of Household")

    # Get user input
    while True:
        try:
            status = int(input("\nEnter filing status (0-3): "))
            if status < 0 or status > 3:
                print("Please enter a number between 0 and 3.")
                continue
            break
        except ValueError:
            print("Please enter a valid number.")

    while True:
        try:
```

```python
        income = float(input("Enter taxable income: $"))

        if income < 0:

            print("Please enter a non-negative income.")

            continue

        break

    except ValueError:

        print("Please enter a valid number.")


# Calculate tax

tax = compute_tax(status, income)


# Display results

print("\n" + "=" * 50)

print(f"Taxable Income: ${income:,.2f}")


# Map status number to description

status_names = [

    "Single",

    "Married Filing Jointly or Qualifying Widow(er)",

    "Married Filing Separately",

    "Head of Household"

]

print(f"Filing Status: {status_names[status]}")

print(f"Total Tax: ${tax:,.2f}")

print("=" * 50)
```

```python
if __name__ == "__main__":
    main()
```