Finlatics Data Science
Capsule 1

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Contents

Task 1

Greet The User and Swap Two Values

1.1 PYTHON CODE:

```
name = input()
print("Hello " + name)
print("Enter two values:")
x,y = input().split()
print("original x: " + x)
print("original y: " + y)
z = x
x = y
y = z
print("swapped x: " + x)
print("swapped y: " + y)
```

1.2 Code

```
1   name = input()
  1 print("Hello " + name)
  2 print("Enter two values:")
  3 x,y = input().split()
  4 print("original x: " + x)
  5 print("original y: " + y)
  6 z = x
  7 x = y
  8 y = z
  9 print("swapped x: " + x)
 10 print("swapped y: " + y)
```

Figure 1.1: Code

1.3 Output

```
>>> DataScience  git:(main) × python capsule1Q1.py
MyName
Hello MyName
Enter two values:
FirstValue SecondValue
original x: FirstValue
original y: SecondValue
swapped x: SecondValue
swapped y: FirstValue
```

Figure 1.2: Output

Task 2

Area of a circle

2.1 PYTHON CODE:

```
print("Enter radius: ")
radius = float(input())
area = 3.14 * (radius**2)
print('Area: ', area)
```

2.2 Code

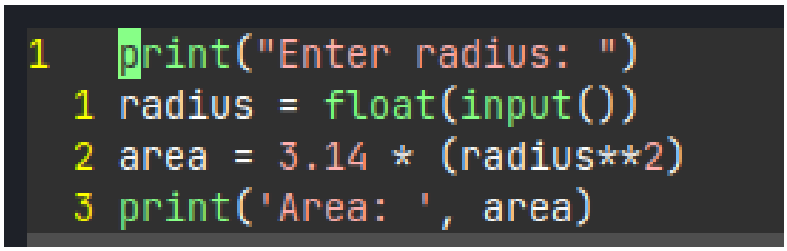

Figure 2.1: Code

2.3 Output

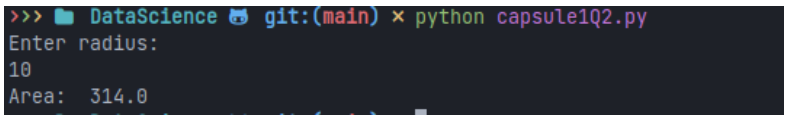

Figure 2.2: Output

Task 3

Age Calculator

3.1 PYTHON CODE:

```
print("Input birth year: ")
year = int(input())
age = 2024-year
print(age)
```

3.2 Code

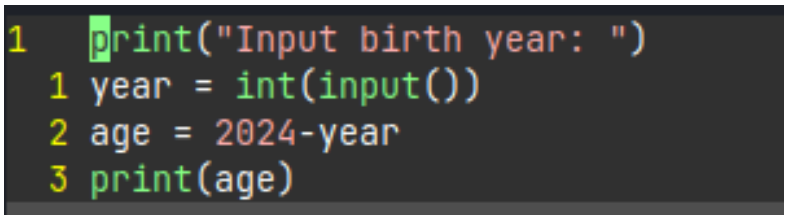

Figure 3.1: Code

3.3 Output

```
>>> DataScience git:(main) x python capsule1Q3.py
Input birth year:
2004
20
```

Figure 3.2: Output

Task 4

Bakery

4.1 PYTHON CODE:

```
print("Enter name and favourite cake flabour:")
name, cake = input().split()
print('Hello,', name, '! Were delighted to serve your
    favourite', cake, 'cake on y
our birthday. Happy Birthday.')
```

4.2 Code

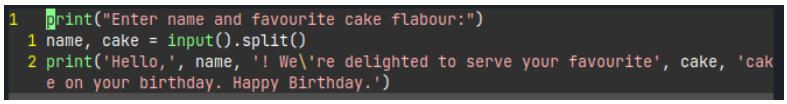

Figure 4.1: Code

4.3 Output

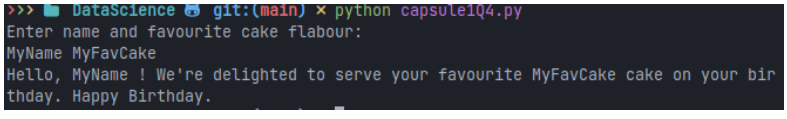

Figure 4.2: Output

Task 5

Simple Interest

5.1 PYTHON CODE:

```
print("Enter principal amount, rate and time:")
x, y, z = input().split()
pAmt = float(x)
rate = float(y)
time = float(z)
simple_interest = (pAmt * rate * time)/100
print(simple_interest)
```

5.2 Code

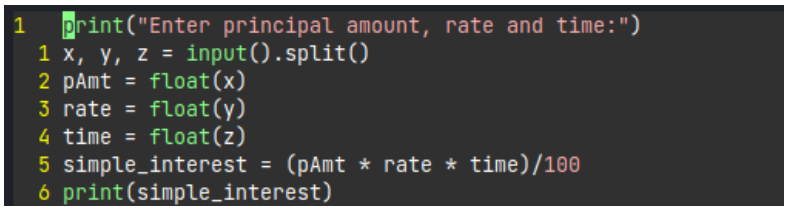

Figure 5.1: Code

5.3 Output

```
>>> DataScience git:(main) x python capsule1Q5.py
Enter principal amount, rate and time:
1000 10 2
200.0
```

Figure 5.2: Output