

ANSWER KEY

PYTHON WORKBOOK – SECTION 2

Variables, Data Types & Operators

Programmer's Hub – by CodeWithVivek
<https://www.youtube.com/@code-with-vivek>

2.1 Variables

Debug This:

2name is invalid → variable names cannot start with a number.

2.2 Data Types

Value Type

"123" str

123 int

12.0 float

True bool

2.3 Typecasting

Debug This:

int("twenty") → cannot convert the word "twenty" to a number.

2.4 Arithmetic Operators

1. $17 // 3 = 5$

2. $17 \% 3 = 2$

3. $2 ** 5 = 32$

2.5 Relational & Logical Operators

Debug This:

$5 > "3"$ → Cannot compare int with str.

2.6 f-Strings

Sample answer:

```
name = "Vivek"
```

```
age = 25
```

```
print(f"My name is {name} and I am {age} years old.")
```

Mini Assignment – Example Solution

```
name = input("Enter name: ")
```

```
m1 = float(input("Enter marks 1: "))
```

```
m2 = float(input("Enter marks 2: "))
```

```
m3 = float(input("Enter marks 3: "))
```

```
total = m1 + m2 + m3
```

```
avg = total / 3
```

```
print(f"Hello {name}, your total is {total} and your average is {avg}")
```

```
if avg >= 40 and avg <= 100:
```

```
    print("Result: PASS")
```

```
else:
```

```
    print("Result: FAIL")
```