# Working with Variables and Data Types Worksheet

In this worksheet, you'll practice using different data types in Python programs. You'll also learn how to combine variables of different types and convert between data types (typecasting).

## 1. Identify Data Types

Look at the following variables and identify their data types (e.g., string, integer, float, boolean):

greeting = "Good morning"  
year = 2024  
temperature = 21.5  
passed\_exam = False

Write your answers here:

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## 2. Combining Data Types

Write a program that outputs a personalized introduction using variables. Here’s an example to help you:

name = "Sam"  
age = 30  
likes\_python = True  
print("Hi, my name is", name, "and I am", age, "years old.")  
print("Do I like Python?", likes\_python)

Modify the program to include your height and a fun fact about yourself.

## 3. Typecasting (Converting Between Data Types)

Convert between different data types using `int()`, `float()`, and `str()`. Here’s an example:

age = input("Enter your age: ")  
age = int(age)  
print("Next year, you will be", age + 1, "years old.")

Practice Task: Write a program that asks for your year of birth, converts it to an integer, calculates your age, and prints it.

## 4. Reflection Questions

1. Why is it important to understand data types in Python?

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2. What happens if you forget to typecast when combining strings and integers?

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3. How could you use booleans in a program, such as a quiz or game?

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