**PHYTHON ASSIGNMENT**

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**ME -CYS**

**Python Assignment**

1. **The following line won't run because of a syntax error**

**Fixed syntax error**

print("hi")

**2. Exercise 2**

The following lines won't run properly,

even if the syntax error in the line above is corrected,

because of a run-time error

Fixed runtime error

print("hello")

**3. Display a string (greeting message) directly**

print("Hello, welcome to Python!")

**4. Display the contents of a string variable**

message = "This is a string variable"

print(message)

**5. Display the string which contains single quotes**

print("Indian's")

**6. Display the string which contains Double Quotes**

print('Students, "Welcome to SOIS".')

**7. Read two numbers and perform calculations**

num1 = float(input("Enter the first number: "))

num2 = float(input("Enter the second number: "))

Calculations

sum\_value = num1 + num2

difference = num1 - num2

product = num1 \* num2

quotient = num1 / num2

remainder = num1 % num2

power = num1 \*\* num2

print(f"Sum: {sum\_value}")

print(f"Difference: {difference}")

print(f"Product: {product}")

print(f"Quotient: {quotient}")

print(f"Remainder: {remainder}")

print(f"Power: {power}")

**8. Check if num1 is an integer**

if num1.is\_integer():

print("num1 is an integer.")

else:

print("num1 is not an integer.")

**9. Convert num1 to an integer**

num1 = int(num1)

**10. Find datatype for variables**

print(type(num1))

print(type(num2))

**11. Read a float value and print the number rounded to 2 decimal places**

float\_value = float(input("Enter a float value: "))

print(f"Rounded value: {round(float\_value, 2)}")

**12. Read a float value and print the absolute value**

print(f"Absolute value: {abs(float\_value)}")

**13. Store different types of values in variables**

string\_value = "Hello"

numeric\_value = 42

complex\_value = 1 + 2j

list\_value = [1, 2, 3]

dict\_value = {"key": "value"}

set\_value = {1, 2, 3}

tuple\_value = (1, 2, 3)

**14. Find the data type for the above variables**

print(type(string\_value))

print(type(numeric\_value))

print(type(complex\_value))

print(type(list\_value))

print(type(dict\_value))

print(type(set\_value))

print(type(tuple\_value))

**15. Display the number of letters in the string**

greeting = "Welcome to Python Programming"

print(len(greeting))

**16. Read first name and last name from the user and combine them**

First\_name = input("Enter your first name: ")

last\_name = input("Enter your last name: ")

full\_name = first\_name + " " + last\_name

greeting\_message = "Hello, " + full\_name + "!"

print(greeting\_message)

**17. Display the string with space**

print(f"{first\_name} {last\_name}")

**18. Display first two characters from the name**

print(full\_name[:2])

**19. Display last three characters from the name**

print(full\_name[-3:])

**20. Display 3rd character to last character**

print(full\_name[2:])

**21. Display 3rd to 5th character**

print(full\_name[2:5])

**22. Create a list of food with two elements**

food = ["Pizza", "Burger"]

**23. Add one more to the food list**

food.append("Pasta")

**24. Add two more food strings**

food.extend(["Salad", "Sushi"])

**25. Count total number of items in the list**

print(len(food))

**26. Print the first two items in food using slicing notation**

print(food[:2])

**27. Print the last item in food using index notation**

print(food[-1])

**28. Debug: Check if the number is odd or even**

**number**

int(input("Enter a number: "))

if number % 2 == 0:

print("The number is Even.")

else:

print("The number is Odd.")

**29. Debug: Convert Centigrade to Fahrenheit**

c = float(input("Enter temperature in Centigrade: "))

f = 9 \* (c / 5) + 32

print("Temperature in Fahrenheit is:", f)

**30. Debug: Calculate average of user inputs**

count = int(input("Enter the count of numbers: "))

total\_sum = 0

for \_ in range(count):

x = int(input("Enter an integer: "))

total\_sum += x

avg = total\_sum / count

print("The average is:", avg)

**31. Prove strings are immutable and lists are mutable**

**Strings are immutable**

str\_value = "Hello"

try:

str\_value[0] = 'h'

except TypeError as e:

print(f"Strings are immutable: {e}")

Lists are mutable

list\_value = [1, 2, 3]

list\_value[0] = 100

print(f"Lists are mutable: {list\_value}")