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

**print("hi)**

correct syntax 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 '''**

**print(hello)**

**correct syntax-**

hello =”hello world”

print(hello)

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

print(“hello,world”)

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

message = "This is a message"

print(message)

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

**Ex: Indian's**

print("Indian's")

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

**Ex: Students,"Welcome to SOIS".**

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

**6. Read two numbers in (user input) and store as num1 and num2, Calculate the sum, difference, product, Quotient, reminder, power**

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

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

print("Sum:", num1 + num2)

print("Difference:", num1 - num2)

print("Product:", num1 \* num2)

print("Quotient:", num1 // num2)

print("Reminder:", num1 % num2)

print("Power:", num1 \*\* num2)

**7. check the value of num1 is integer or not?**

print(isinstance(num1, int))

**8. convert into integer**

num1 = int(num1)

**9. Find the datatype for the variable num1 and num2.**

print("Data type of num1:", type(num1))

print("Data type of num2:", type(num2))

**10. read the float value from the user and print the number rounded to 2 decimal places**

number = float(input("Enter a float value: "))

print(round(number, 2))

**11. read the float value from the user and print the absolute value**

number = float(input("Enter a float value: "))

print(abs(number))

**12. Store different type values in the variabale**

**String**

**numeric**

**complex**

**list**

**dictionary**

**set**

**tuple**

str\_var = "String"

num\_var = 123

complex\_var = 3 + 4j

list\_var = [1, 2, 3]

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

set\_var = {1, 2, 3}

tuple\_var = (1, 2, 3)

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

print(type(str\_var))

print(type(num\_var))

print(type(complex\_var))

print(type(list\_var))

print(type(dict\_var))

print(type(set\_var))

print(type(tuple\_var))

**14. # Display the number of letters in the string**

**greeting = "Welcome to Python Programming"**

greeting = "Welcome to Python Programming"

print(len(greeting))

**15. read the first name and last name from the user and combine first name and last name. combine name and greeting message**

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

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

combined\_name = first\_name + " " + last\_name

print(combined\_name + ", welcome!")

**16. Display the string with space**

**Ex: firstname lastname**

print(first\_name + " " + last\_name)

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

print(first\_name[:2])

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

print(first\_name[-3:])

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

print(first\_name[2:])

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

print(first\_name[2:5])

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

food = ["Apple", "Banana"]

**22. Add one more to the food list using .append()**

food.append("Cherry")

**23. Add two more food strings to food using .extend()**

food.extend(["Orange", "Grapes"])

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

print(len(food))

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

print(food[:2])

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

print(food[-1])

**27. Debug: Program is to check the given number is odd or even**

**number = input("Enter a number: ")**

**x = str(number)/2**

**if x == 0**

**print("The number is Even.")**

**else**

**print("The number is Odd.")**

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

if number % 2 == 0:

print("The number is Even.")

else:

print("The number is Odd.")

**28. Debug: Program is to convert centigrade to Fahrenheit**

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

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

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

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

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

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

**29. Debug:**

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

**i = 0**

**summ= 0**

**for i in range(count):**

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

**sum = sum + x**

**avg = sum/count**

**print("The average is: ", avg)**

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

summ = 0

for i in range(count):

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

summ += x

avg = summ / count

print("The average is:", avg)

**30. Prove : strings is not mutable**

**lists are mutable**

string\_example = "hello"

try:

string\_example[0] = 'H'

except TypeError:

print("Strings are immutable.")

list\_example = [1, 2, 3]

list\_example[0] = 100

print("Lists are mutable:", list\_example)