

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

```
print("hi)
```

#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 '''

```
print(hello)
```

#fixed runtime error

```
print("hello")
```

3. # Display a string (greeting message) directly

```
print("Hello World")
```

4. # Display the contents of a string variable

```
string = "hello"
```

```
print(string)
```

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".')
```

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

```
num1 = int(input("Enter the 1st number:"))
```

```
num2 = int(input("Enter the 2nd number:"))
```

```
sum = num1 + num2
```

```
difference = num1 - num2
```

```
product = num1 * num2
```

```
quotient = num1 / num2
```

```
remainder = num1 % num2
```

```
power = num1 ** num2
```

```
print("sum:", sum, "difference:", difference, "product:", product, "quotient:", quotient, "remainder:", remainder, "power:", power)
```

8. check the value of num1 is integer or not?

```
if print(type(num1) == int):
```

```
    print("num1 is an integer:")
```

```
else:
```

```
    print("num1 is not an integer:")
```

9. convert into integer

```
num1 = int(num1)
```

10. Find the datatype for the variable num1 and num2.

```
print(type(num1))
```

```
print(type(num2))
```

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

```
X = float(input("Enter a float value:"))
```

```
print("rounded value:",round(X,2))
```

12. read the float value from the user and print the absolute value

```
X = print(float(input("Enter a float value:")))
```

```
y = abs(X)
```

```
print("absolute value:",y)
```

13. Store different type values in the variable

```
String = "Hello"
```

```
numeric = 56
```

```
complex = 1+2j
```

```
list = [1,2,3]
```

```
dictionary = {"key": "value"}
```

```
set = {1,2,3}
```

```
tuple = (1,2,3)
```

14. Find the data type for the above variables

```
print(type(String))
```

```
print(type(numeric))  
print(type(complex))  
print(type(list))  
print(type(dictionary))  
print(type(set))  
print(type(tuple))
```

15. # Display the number of letters in the string

```
greeting = "Welcome to Python Programming"  
print(len(greeting))
```

16. 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 ypur first name:")  
second_name = input("Enter ypur second name:")  
full_name = first_name + " " + second_name  
print(full_name)  
greeting = "Hello"  
print(greeting + " " + full_name)
```

17. Display the string with space

Ex: firstname lastname

```
full_name = first_name + " " + second_name
```

18. Display first two characters from the name

```
print(full_name[1:3])
```

19. Display last three characters from the name

```
print(full_name[1:4])
```

20. Display 3rd character to last character

```
print(full_name[3:])
```

21. Display 3rd to 5th character

```
print(full_name[3:6])
```

22. Create a list of food with two elements.

```
food = [{"Pasta", "Biryani"}]
```

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

```
food.append("Pizza")
```

24. Add two more food strings to food using .extend()

```
food.extend(["daal", "Rice"])
```

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: Program is to check the given 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: Program is to convert centigrade to Fahrenheit

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

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

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

30. Debug:

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

```
sum = 0
```

```
for _ in range(count):  
    x = int(input("Enter an integer: "))  
    sum = sum + x  
    avg = sum/count  
print("The average is: ", avg)
```

31. Prove : strings is not mutable

Greeting = "hello"

try:

Greeting[0] = 'p'

except TypeError as e:

print("strings are immutable: {e}")

lists are mutable

List1 = [1,2,3]

List1[0] = 6

print("Lists are mutable", List1)