16/07/2025, Wednesday,Practice Document

1. Secure Banking Login and Transaction System without using conditional statements.

```
A_name = "Sriram kolla"
bank_bal = 50000000
password = "Sriram@1795"
account_num = 20304062612

Name = str(input("enter your user name:"))
Acc_num = int(input("enter account number: "))
passwords = str(input("enter password: "))

check = account_num == Acc_num
is_correct = password == passwords
is_ncorrect = A_name == Name
login_status = check * is_correct * is_ncorrect

print("user name:",Name)
print("account numbers : ",Acc_num)
print("login status: ",bool(login_status))
print(" login Successfull" * login_status + "login failed" * (1 - login_status))

print("your savings is : ",bank_bal * login_status)

deposite = int(input("enter deposite amount: "))* login_status
bank_bal += deposite
print("current balance: ",bank_bal * login_status)
withdraw = int(input("enter withdraw amount: ")) * login_status
print("current_balance: ",bank_bal * login_status)
bank_bal -= withdraw
print("total balance: ",bank_bal* login_status)
```

2. Simple Intrest calculator.

```
#Simple Interest Calculator

#Input: principal, rate, time

#Formula: SI = (P × R × T) / 100

#Output: Simple interest

p = int(input("principle: "))
r = int(input("rate: "))
t = int(input("time: "))

SI = (p*r*t)/100
print(SI)
```

3. Body Mass Index (BMI)

```
#Input: weight (kg) and height (m)

#Formula: BMI = weight / (height ** 2)

#Output: Show BMI rounded to 2 decimal places
weight = int(input("enter the weight: "))
height = float(input("enter the height: "))
BMI = weight / (height ** 2)
print(BMI)
```

4. Area & Perimeter of Rectangle:

```
#Area = length * breadth
#Perimeter = 2 * (length + breadth)
length = int(input("Enter the length: "))
breadth = int(input("enter the breadth: "))
Area = length * breadth
```

```
perimeter = 2 * (length + breadth)
print(Area)
print(perimeter)
```

5. Temperature Converter

```
#Input: Celsius
#Convert to Fahrenheit → (C × 9/5) + 32
celsius = int(input("enter the celsius: "))
Fahrenheit = (celsius * 9/5) + 32
print(Fahrenheit)
```

6. Positive and negative and zero

```
number = int(input("Enter the numbbers: "))
if number == 0:
    print(number," is zero")
elif number <= 0:
    print(number," negitive number")
else:
    print(number," positive number")
```

7. Check if the entered character is a vowel (a, e, i, o, u).

```
char = str(input("enter the charector: "))
vowels = ["a","e","i","o","u"]
if char in vowels:
    print(char," is vowel")
else:
    print(char,"is not vowel")
```

8. Write a program to check if a number is both even and divisible by 5.

```
num = int(input("enter the number: "))
set = num % 2 == 0 and num % 5 ==0
print(set)
```

```
print("it is even number and it is divisible by 5"* set + "it even but not divisible by 5" * (1-set))
```

9. Electricity Bill Calculator

```
bill = int(input("enter the total: "))
if bill <= 100:
   print(bill,"5 units")
elif bill >= 200:
   print(bill,"10 units")
else:
   print(bill,"7 units")
```

10. Write a program to find the largest of three given numbers.

```
a = int(input("enter num : "))
b = int(input("enter num : "))
c = int(input("enter num : "))

largest=  (a* ((a>= b)and (a>=c))) + b*((b>= a)and (b>=c))+ c*((c>=a)and(c>=b))
print("largest num is: ",largest)
```

11. Student Grade Calculation

```
percentage = int(input("enter percentage: "))

conditions = [percentage >= 90, percentage >= 75, percentage >= 50,
percentage < 50]
grades = ["A", "B", "C", "Fail"]
index= conditions.index(True)
print("Grade:", grades[index])
```

12. . Check Login Credentials

```
username = "sriram kolla"
password = "Sriram@1795"
```

```
name = str(input("enter the name: "))
paswd = str(input("enter the password: "))

check = (username == name and password == paswd)
print(check)
print("login satus: ", bool(check * check))
```

13. Simple Calculator

```
num1 = float(input("enter the num : "))
num2 = float(input("enter the num : "))
opp = input("enter the operation : ")
if opp == "+":
    result = num1+ num2
elif opp == "-":
    result= num1-num2
elif opp == "*":
    result = num1*num2
elif opp == "%":
    result= num1%num2
elif opp == "/":
    result = num1/num2
else:
    result = num1**num2
print(result,"result")
```

14. Check if a number exists in a predefined list

```
num = int(input("enter the number: "))
list = [23,45,66,76,89,33,54,10,20,23,34,87]
if num in list:
    print(num,"yes")
else:
    print(num,"No")
```

15. Check if a string is a palindrome

```
str = str(input("enter the string: "))

str1 = (str[::-1])
if str == str1:
    print("palindrome")
else:
    print("not palindrome")

print(str)
print(type(str))
```

16. Check if a number is within a range

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

if 10 <= num <= 50:
    print(f"{num} is within the range 10 to 50 ")
else:
    print(f"{num} is NOT within the range ")
```

17. Determine age group

```
age = int(input("enter the age : "))
if age in range(0,13):
    print("child")
elif age in range(13,19):
    print("teen age")
elif age in range(20,59):
    print("adult")
else:
    print("senior")
```

18. Traffic Light Simulator

```
name = str(input("enter the color: "))
if name == "green":
    print(name,"go")
elif name == "yellow":
    print(name,"ready to go")
elif name == "orange":
    print(name,"go slow")
else:
    print(name,"stop")
```

19. Compare two strings ignoring case

```
str1 = input("Enter first string: ")
str2 = input("Enter second string: ")

if str1.lower() == str2.lower():
    print("The strings are equal (ignoring case).")
else:
    print(" The strings are NOT equal.")
```