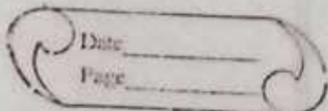


EXPERIMENT NO:-8



- Q1 write a function to find the square of a number
- Q2 write a function to check whether a number is even or odd.
- Q3 write a function to find the sum of two numbers
- Q4 write a function to find the factorial of a number
- Q5 write a function to check whether a number is prime
- Q6 write a function to reverse a string.
- Q7 write a function to count vowels in a string.
- Q8 write a function to find the largest of three numbers.
- Q9 write a function to calculate simple interest.

Answer :-

① def square(a):
 return a ** 2

a = int(input("Enter a number :-"))
print(f" ${a}^2 = \{square(a)\}$ ")

Output:-

Enter a number :- 5

$5^2 = 25$

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2 def check(a):
    return "Even" if a%2==0 else "Odd"
n=int(input("Enter a number :-"))
print(n, "is", check(n))
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OUTPUT:-

Enter a number :- 15

15 is odd

3 def sum(a,b):

 return a+b

a = int(input("Enter first number :-"))
 b = int(input("Enter second number :-"))
 print(f'{a} + {b} = {sum(a,b)}')

Output:-

Enter first number :- 2

Enter second number :- 3

2 + 3 = 5

4 def fact(a):

 return (1 if a == 1 else a * fact(a-1))

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

print(f"The factorial of {a} is {fact(a)}")

Output:-

Enter a number :- 4

The factorial of 4 is 24

5 def primeCheck(a):

 for i in range(2,a):

 if a % i == 0 :

 return "not"

 return "

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

print(f'{a} is {primeCheck(a)} a prime number')

Output:-

Enter a number :- 15

15 is not a prime number

6 def rev(s):

return (s if s == "" else (rev(s[1:]) + s[0]))

n = input ("Enter a string :- ")
print ("{} reverse is :- {}".format(n, rev(n)))

Output:-

Enter a string :- Rajesh
Rajesh reverse is :- hsejahr

7 def vowelCount(s):

count = 0

for i in s:

if i in ['a', 'e', 'i', 'o', 'u', 'A', 'E', 'I', 'O', 'U']:
 count += 1

return count

n = input ("Enter a string :- ")
print ("{} contains {} vowel(s.)".format(n, vowelCount(n)))

Output:-

Enter a string :- Rajesh
Rajesh contains 2 vowels

8 def largest(a, b, c):

 return a if (a >= b and a >= c) else b if (b >= c) else c

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

b = int(input("Enter second number :-"))

c = int(input("Enter third number :-"))

print("Largest among these three numbers is ", largest(a, b, c))

Output:-

Enter first number :- 3

Enter second number :- 1

Enter third number :- 2

Largest among these three numbers is 3

9 def SI(p, r, t):

 return (p * r * t) / 100

p = float(input("Enter the principal amount :-"))

r = float(input("Enter the rate of interest :-"))

t = float(input("Enter the time period in years :-"))

Print("Simple interest is ", SI(p, r, t))

Output:-

Enter the principal amount :- 20000

Enter the rate of interest :- 7

Enter the time period in years :- 2.4

Simple interest is 3360.0