

Q1_circle_area.py

Code:

```
# Write a Python program which accept the radius of a circle from the user and compute the area.
# Sample Output :
# r = 1.1
# Area = 3.8013271108436504

radius=float(input("please enter the radius of the circle for which you want the area \n"))
area=22/7*pow(radius,2)
print(area);
```

Q2_temperature.py

Code:

```
# Q2: Temperature of a city in Fahrenheit degrees is input through the keyboard. Write a program to convert it to Centigrade degrees.

fahrenheit=float(input("please enter the temperature in farhenheit\n"))
centigrade=(5/9)*(fahrenheit-32)
print(f"{fahrenheit} F in centigrade is {centigrade}")
```

Q3_simple_calculator.py

Code:

```
# Write a Python Program to make a simple calculator that can add, subtract, multiply and divide

num1=float(input("please enter the first number\n"))
num2=float(input("please enter the second number\n"))
operation=int(input("please enter 1 for addition 2 for subtraction 3 for multiply and 4 for division\n"))

if(operation ==1):
    print (num1+num2)
elif(operation==2):
    print(num1-num2)
elif(operation==3):
    print(num1*num2)
if(num2!=0):
    if(operation==4):
        print(num1/num2)
else:
    print("cannot divide by zero")
```

Q4_square_root.py

Code:

```
# Q4: Write a Python Program to calculate the square root
from math import *
# from math import sqrt for only sqrt function to be imported in the module

num=float(input("please enter the number for which you want the square root"))
print(sqrt(num))
```

Q5_quadratic_equation.py

Code:

```
# Q5: Write a Python Program to Solve the quadratic equation ax**2 + bx + c = 0
# # Coefficients a, b and c are provided by the user

# [Hint: import complex math module - import cmath]

from math import *

a=int(input("enter the first coefficient a\n"))
b=int(input("enter the second coefficient b\n"))
c=int(input("enter the third coefficient c\n"))

discriminant=b*b-4*a*c

deno=2*a

if(discriminant>0):
    print((-b+sqrt(discriminant)/deno)
    print(+(b+sqrt(discriminant)/deno)

elif(discriminant==0):
    print(-b/deno)
    print(+(b/deno)

else:
    real_roots=-b/deno
    imag=sqrt(-discriminant)/deno
    print(complex(real_roots,imag))
    print(complex(real_roots,-imag))
```

Q6_area_of_triangle.py

Code:

```
# Q6: Write a Python Program to find the area of triangle
# # Three sides of the triangle a, b and c are provided by the user
from math import *

a=float(input("enter the first side of triangle a\n"))
b=float(input("enter the second side of triangle b\n"))
c=float(input("enter the third side of triangle c\n"))

s=(a+b+c)/2

area=sqrt(s*(s-a)*(s-b)*(s-c))
print(f"area of triangle is {area}")
```

Q7_printing.py

Code:

```
# Write a Python program to print the following string in a specific format

print("Twinkle"+"", "+" twinkle,"+" little star,")
print ("\\t How i wonder what you are!")
print("\\t\\tUp above the world so high,")
print("\\t\\tLike a diamond in the sky.")
print("Twinkle"+"", "+" twinkle,"+" little star,")
print ("\\t How i wonder what you are")
```

Output:

```

Twinkle,  twinkle, little star,
■ How i wonder what you are!
■■Up above the world so high,
■■Like a diamond in the sky.
Twinkle,  twinkle, little star,
■ How i wonder what you are

```

Q8_display_details.py

Code:

```

# Q8: Write a Python program to display your details like name, age, address in three different lines.

name=input("enter the name\n")
age=int(input("enter the age\n"))
address=input("enter the address\n")

print(f"name is {name}")
print(f"age is {age}")
print(f"addresss is {address}")

```

Q9_sum_of_digits.py

Code:

```

# Q9: If a five-digit number is input through the keyboard, write a program to calculate the sum of digits.

num=(input("please enter a 5 digit number \n"))
if(len(num)==5):
    sum=int(num[0])+int(num[1])+int(num[2])+int(num[3])+int(num[4])
print(f"sum of digits of {num} is {sum}")

```

Q10_string_with_double_quotes.py

Code:

```

# 10.Create a string containing both a single quote and double quote

string1=input("please enter the string which contain both double quotes and single quotes\n")

string2="hello i am divyansh and\"this is his code\" hi's"
print(string1)
print(string2)

```

Q11_triple_quoted_string.py

Code:

```

# 11.Create a triple quoted string that contains single and double quotes.
string1=""" hello this is a triple quoted string which contains "double quotes" and a 'single quote' also """
print(string1)

```

Output:

```

hello this is a triple quoted string which contains "double quotes" and a 'single quote' also

```

Q12_character_to_integer.py

Code:

```
# 12. Create a character, then obtain its integer representation.

input1=input("please enter a single character for which you want the integer representaion \n")

print(ord(input1))
```

Q13_5copies_of_string.py

Code:

```
# 13. Create a single string containing 5 copies of the string 'abc'.

string1=input('please enter the string here for which you want 5 copies')
string2="abc"
print(5*string1)
print(5*string2)
```

Q14_line_of_50_dashes.py

Code:

```
# 14.Use the multiplication operator to create a "line" of 50 dashes.

string1="-"
print(string1*50)
```

Output:

Q15_to_all_uppercase.py

Code:

```
# 15. Convert a string to all upper case.

string1="asdfghSDFGHZxcvbnASDFGHJzxcvbnm"
print(string1.upper())
```

Output:

ASDFGHSDFGHZXCVBNASDFGHJZXCVBNM

Q16_string_of_2chars_from_start.py

Code:

```
# Q16 : Write a Python program to get a string made of the first 2 and the last 2 chars from a given string  
string1="Hello world"  
print(string1[0:2]+string1[-2:])
```

Output:

```
Held
```

Q17_first_occurrence_changed_to\$.py

Code:

```
# Q17: a Python program to get a string from a given string where all occurrences of its first char have been replaced with '$'  
# Sample String : 'restart'  
# Expected Result : 'resta$t'  
  
string1=input("please enter the string which you want to do the operation\n")  
char1=string1[0]  
result=char1  
  
for i in string1[1:]:  
    if(i == char1):  
        result+='$'  
    else:  
        result+=i  
  
print(result)
```

Q18_string_change.py

Code:

```
# Q18: Write a Python program to get a single string from two given strings, separated by a space and joined by the character '*'  
# Sample String : 'abc', 'xyz'  
# Expected Result : 'xyc abz'  
  
string1=input("enter the first string\n")  
string2=input("enter the second string\n")  
string3=(string2[0:2]+string1[2:]+ " "+string1[0:2]+string2[2:])  
print(string3)
```