

Q1_circle_area.py

```
1 # Write a Python program which accept the radius of a circle from the user and compute the area.
2 # Sample Output :
3 # r = 1.1
4 # Area = 3.8013271108436504
5
6
7 radius=float(input("please enter the radius of the circle for which you want the area \n"))
8 area=22/7*pow(radius,2)
9 print(area);
```

Q2_temperature.py

```
1 # Q2: Temperature of a city in Fahrenheit degrees is input through the keyboard. Write a program to convert this temperature into Centigrade degrees.
2
3 fahrenheit=float(input("please enter the temerature in farhenheit\n"))
4 centigrade=(5/9)*(fahrenheit-32)
5 print(f"{fahrenheit} F in centigrade is {centigrade}")
```

Q3_simple_calculator.py

```
1 # Write a Python Program to make a simple calculator that can add, subtract, multiply and divide
2
3 num1=float(input("please enter the first number\n"))
4 num2=float(input("please enter the second number\n"))
5 operation=int(input("please enter 1 for addition 2 for subtraction 3 for multiply and 4 for division "))
6
7 if(operation ==1):
8     print (num1+num2)
9 elif(operation==2):
10    print(num1-num2)
11 elif(operation==3):
12    print(num1*num2)
13 if(num2!=0):
14     if(operation==4):
15         print(num1/num2)
16 else:
17     print("cannot divide by zero")
```

Q4_square_root.py

```
1 # Q4: Write a Python Program to calculate the square root
2 from math import *
3 # from math import sqrt for only sqrt function to be imported in the module
4
5 num=float(input("please enter the number for which you want the square root"))
6 print(sqrt(num))
```

Q5_quadratic_equation.py

```
1 # Q5: Write a Python Program to Solve the quadratic equation  $ax^2 + bx + c = 0$ 
2 # # Coefficients a, b and c are provided by the user
3
4 # [Hint: import complex math module - import cmath]
5
6 from math import *
7
8 a=int(input("enter the first coefficient a\n"))
9 b=int(input("enter the second coefficient b\n"))
10 c=int(input("enter the third coefficient c\n"))
11
12 discriminant=b*b-4*a*c
13
14 deno=2*a
15
16 if(discriminant>0):
17     print(-b+sqrt(discriminant)/deno)
18     print(+b+sqrt(discriminant)/deno)
19
20 elif(discriminant==0):
21     print(-b/deno)
22     print(+b/deno)
23
24 else:
25     real_roots=-b/deno
26     imag=sqrt(-discriminant)/deno
27     print(complex(real_roots,imag))
28     print(complex(real_roots,-imag))
```

Q6_area_of_triangle.py

```
1 # Q6: Write a Python Program to find the area of triangle
2 # # Three sides of the triangle a, b and c are provided by the user
3 from math import *
4
5 a=float(input("enter the first side of traiangle a\n"))
6 b=float(input("enter the second side of traiangle b\n"))
7 c=float(input("enter the third side of traiangle c\n"))
8
9 s=(a+b+c)/2
10
11 area=sqrt(s*(s-a)*(s-b)*(s-c))
12 print(f"area of triangle is {area}")
```

Q7_printing.py

```
1 # Write a Python program to print the following string in a specific format
2
3 print("Twinkle"+" ", "+" twinkle, "+" little star,")
4 print ("\t How i wonder what you are!")
5 print ("\t\tUp above the world so high,")
6 print ("\t\t\tLike a diamond in the sky.")
7 print("Twinkle"+" ", "+" twinkle, "+" little star,")
8 print ("\t How i wonder what you are")
```

Q8_display_details.py

```
1 # Q8: Write a Python program to display your details like name, age, address in three different lines.
2
3 name=input("enter the name\n")
4 age=int(input("enter the age\n"))
5 address=input("enter the address\n")
6
7 print(f"name is {name}")
8 print(f"age is {age}")
9 print(f"addresss is {address}")
```


Q9_sum_of_digits.py

```
1 # Q9: If a five-digit number is input through the keyboard, write a program to calculate the sum of its digits without using any loop. (Hint: Use the modulus operator)
2
3 num=input("please enter a 5 digit number \n")
4 if(len(num)==5):
5     sum=int(num[0])+int(num[1])+int(num[2])+int(num[3])+int(num[4])
6 print(f"sum of digits of {num} is {sum}")
```

Q10_string_with_double_quotes.py

```
1 # 10.Create a string containing both a single quote and double quote
2
3 string1=input("please enter the string which contain both double quotes and single quotes\n")
4
5 string2="hello i am divyansh and\"this is his code\" hi's"
6 print(string1)
7 print(string2)
```

Q11_triple_quoted_string.py

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

Q12_character_to_integer.py

```
1 # 12. Create a character, then obtain its integer representation.  
2  
3 input1=input("please enter a single character for which you want the integer erpresentaion \n")  
4  
5 print(ord(input1))
```

Q13_5copies_of_string.py

```
1 # 13. Create a single string containing 5 copies of the string 'abc'.  
2  
3 string1=input('please enter the string here for which you want 5 copies')  
4 string2="abc"  
5 print(5*string1)  
6 print(5*string2)
```

Q14_line_of_50_dashes.py

```
1 # 14.Use the multiplication operator to create a "line" of 50 dashes.  
2  
3 string1="-"  
4 print(string1*50)
```

Q15_to_all_uppercase.py

```
1 # 15. Convert a string to all upper case.  
2  
3 string1="asdfghSDFGHzxcvbnASDFGHJzxcvbnm"  
4 print(string1.upper())
```

Q16_string_of_2chars_from_start.py

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


Q17_first_occurrence_changed_to\$.py

```
1 # Q17: a Python program to get a string from a given string where all occurrences of its first char have been changed to '$', except the first char itself.
2 # Sample String : 'restart'
3 # Expected Result : 'resta$t'
4
5 string1=input("please enter the string which you want to do the operation\n")
6 char1=string1[0]
7 result=char1
8
9
10 for i in string1[1:]:
11     if(i == char1):
12         result+='$'
13     else:
14         result+=i
15
16
17 print(result)
```

Q18_string_change.py

```
1 # Q18: Write a Python program to get a single string from two given strings, separated by a space and swap the first two characters of each string.
2 # Sample String : 'abc', 'xyz'
3 # Expected Result : 'xyc abz'
4
5 string1=input("enter the first string\n")
6 string2=input("enter the second string\n")
7 string3=(string2[0:2]+string1[2:]+string1[0:2]+string2[2:])
8 print(string3)
```