

Function

Question 1

```
In [3]: def fraction():  
        num1 = int(input("Enter the 1st number = "))  
        num2 = int(input("Enter the 2nd number = "))  
  
        if num1 == 0:  
            print('0')  
  
        elif num2 == 0:  
            print('0')  
  
        else:  
            a = num1/num2  
            b = int(a)  
            fraction_part = a-b  
            print(fraction_part)
```

fraction()

Enter the 1st number = 5
Enter the 2nd number = 2
0.5

Question 2

```
In [5]: def calculateBMI():

    height = int(input("Enter the height (cm) = "))
    weight = int(input("Enter the weight (kg) = "))

    height_meter = height/100

    BMI = weight/(height_meter*height_meter)

    if BMI < 18.5:
        print("Score is %.1f"% BMI, 'You are Underweight' )
    elif BMI >= 18.5 and BMI<25 :
        print("Score is %.1f" % BMI, 'You are Normal' )
    elif BMI >=25 and BMI<=30 :
        print("Score is %.1f" % BMI, 'You are Overweight' )
    else:
        print("Score is %.1f" % BMI, 'You are Obese')

calculateBMI()
```

```
Enter the height (cm) = 175
Enter the weight (kg) = 96
Score is 31.3 . You are Obese
```

Question 3

```
In [1]: def my_func(minimum,maximum,divisor):  
        sum = 0  
        for i in range(minimum,maximum):  
            if i%divisor == 0:  
                sum = sum + i  
        return sum  
print(my_func(0,10,2))
```

20

Question 4

```
In [2]: item_list = []
num1 = int(input("Enter how may items you want to oder = "))
i = 1
while i <= num1:
    x = input(" Enter your oder = ").lower()
    item_list.append(x)
    i = i + 1

def recipet(my_list, location = 'Mohakhali'):
    menu_list={'bbq chicken cheese burger':250,'beef burger':170,'naga drums':200}
    meal_cost = 0
    for item in item_list:
        meal_cost += menu_list[item]

    if location!='Mohakhali':
        total_cost = meal_cost + 60 + meal_cost*(0.08)
    else:
        total_cost = meal_cost + 40 + meal_cost*(0.08)

    return total_cost

print(recipet(item_list))
```

```
Enter how may items you want to oder = 1
Enter your oder = beef burger
223.6
```

Question 5

```
In [1]: def domain(email,new_domain,old_domain = 'kaaj.com'):
        for i in email:

            if i == "@":

                index = email.index(i)

                current_domain = email[index+1:]

                if current_domain == new_domain:
                    print("Unchanged :", email)

                else:
                    new_email = email[:index] + "@" + new_domain
                    print('Changed :', new_email)

        email = input("Enter the email = ")
        new_domain = input("Enter the new domain = ")
        old_domain = input('Enter the old domain = ')

        domain(email,new_domain,old_domain)
```

```
Enter the email = alice@kaaj.com
Enter the new domain = sheba.xyz
Enter the old domain = kaaj.com
Changed : alice@sheba.xyz
```

Question 6

```
In [6]: def vowel(string):
        vowel_list = ["a", "e", "i", "o", "u"]
        new_list = []
        print_string = ''
        for i in string:
            if i in vowel_list:
                new_list.append(i)
        for j in new_list:
            print_string += j
            print_string += ","
        length = len(new_list)
        if length > 0:
            print("Vowels:", print_string[:-1], "Total number of vowels:", length)
        else:
            print("No vowels in the name!")

name = input('Enter the name = ')
vowel(name)
```

Enter the name = Steve Jobs

Vowels: e,e,o Total number of vowels: 3

Question 7

```
In [1]: def Palindrome():  
  
    string = input("Enter the string = ")  
    string1 = string.replace(" ", "")  
    string2 = ""  
  
    for i in string1:  
  
        string2 = i + string2  
  
    if (string1 == string2):  
        print("Palindrome")  
  
    else:  
        print("Not a Palindrome")
```

Palindrome()

Enter the string = nurses run
Palindrome

Question 8

```
In [2]: def year_month_day():  
    num = int(input("Enter the number of days = "))  
    year = num//365  
    year1 = num%365  
    month = year1//30  
    day = year1%30  
    print(year,"years,", month,"months", 'and', day,"days ")  
year_month_day()
```

Enter the number of days = 4330
11 years, 10 months and 15 days

Question 9


```
In [5]: def capitalize(string):
    for i in range(len(string)-2):
        if string.find(" i ", i) == -1:
            break

        i = string.find(" i ", i)
        string = string[:i+1]+"I"+string[i+2:]

    punctuation_marks = [".", "!", "?"]

    for j in range(len(punctuation_marks)):
        k = 0

        while k < len(string):
            if string.find(punctuation_marks[j], k) == -1:
                break

            k = string.find(punctuation_marks[j], k)

            if k+3 < len(string):
                string = string[:k+2]+string[k+2].upper()+string[k+3:]
                k += 1

    string = string[0].upper() + string[1:]
    print(string)

string = input('Enter the paragraph = ')

capitalize(string)
```

Enter the paragraph = my favourite animal is a dog. a dog has sharp teeth so that it can eat flesh very easily. do you know my pet dog's name? i love my pet very much.
My favourite animal is a dog. A dog has sharp teeth so that it can eat flesh very easily. Do you know my pet dog's name? I love my pet very much.

In []:

