**MODULE – 3 ASSIGNMENT**

**Conditional Statements**

**Please write Python Programs for all the problems.**

1. Take a variable ‘age’ which is of positive value and check the following:
2. If the age is less than 10, print “Children”.
3. If the age is more than 60, print ‘senior citizens’
4. If it is between 10 and 60, print ‘normal citizen’
5. Find the final train ticket price with the following conditions.
6. If male and sr.citizen, 70% of the fare is applicable
7. If female and sr.citizen, 50% of the fare is applicable.
8. If female, and normal citizen, 70% of the fare is applicable
9. If male and normal citizen, 100% of fare is applicable

[Hint: Firstly check for the gender, then calculate the fare based on the age factor. For both Male and Female, consider them as sr.citizens if their age >=60]

1. Write a code to check whether the given number is positive and divisible by 5 or not.

**Conditional Statements**

**Please implement Python coding for all the problems.**

1. A) list1 = [1, 5.5, (10+20j), ’data science’]. Print default functions and parameters exists in list1.

B) How do we create a sequence of numbers in Python?

C) Read the input from the keyboard and print a sequence of numbers up to that number

1. Create 2 lists, one list containing 10 numbers (list1 = [0, 1, 2, 3,...., 9]) and the other list containing words for the 10 numbers (list2 = ['zero', 'one', 'two', ...., 'nine']).

Create a dictionary such that the list2 elements are defined as keys and list1 elements as values

1. Consider a list1 [3, 4, 5, 6, 7, 8]. Create a new list2, 10 added to the even numbers, and multiply with 5 if the number is an odd number in the list1.

4. Write a simple user-defined function that greets a person in such a way that :

i) It should accept the Name of the person and the message that you want to deliver as input.

ii) If no message is provided, it should greet a default message: ‘How are you’

Ex: Hello ---xxxx---, How are you -🡪 default message.

Ex: Hello ---xxxx---, --xx your message xx---

Soln:

################################## PROBLEM 1 #################################

#1. Take a variable ‘age’ which is of positive value and check the following:

#a. If age is less than 10, print “Children”.

#b. If age is more than 60 , print ‘senior citizens’

#c. If it is in between 10 and 60, print ‘normal citizen’

age=25

if age < 10: #If age is less than 10

print("Children")

elif age > 60: #If age is greater than 60

print('senior citizens')

else:

print('normal citizen')

################################## PROBLEM 2 #################################

#2. Find the final train ticket price with the following conditions.

#a. If male and sr.citizen, 70% of fare is applicable

#b. If female and sr.citizen, 50% of fare is applicable.

#c. If female and normal citizen, 70% of fare is applicable

#d. If male and normal citizen, 100% of fare is applicable

age = 50

gender= 'female'

if age > 60 and gender == 'male' : #Checking for male and senior citizen

print("70% of fare is applicable")

elif age > 60 and gender == 'female': #Checking for female and senior citizen

print('50% of fare is applicable')

elif (age>10 and age <60) and gender == 'female': #Checking for female and normal citizen

print("70% of fare is applicable")

elif (age>10 and age <60) and gender == 'male': #Checking for male and normal citizen

print("100% of fare is applicable")

else:

print('Enter the age and gender') #Prompt the message ff values are not provided

################################## PROBLEM 3 #################################

#3. Check whether the given number is positive and divisible by 5 or not.

a=int(input('Enter the number:'))

if a>0 and a%5==0: # Checking for positive number and divisibilty by 5

print('Number is positive and divisible by 5')

elif a<0 and a%5==0: #if number is negative and divisible by 5

print('Number is negative but divisible by 5')

elif a>0 and a%5!=0: #if number is positive and not divisible by 5

print('Number is positive but not divisible by 5')

elif a<0 and a%5!=0: #if number is negative and not divisible by 5

print('Number is negative and not divisible by 5')

else:

print('Enter a non zero nnumber') #Prompting the message if zero is provided.

**Conditional Statements**

# 1 answer

list1=[1,5.5,complex(10,20),'data science']

for i in list1:

print(i)

l=[]

inpu=int(input('how many numbers do you want:'))

for i in range(inpu):

l.append(i)

for i in l:

print(i)

# 2 answer

kiran=[0,1,2,3,4,5,6,7,8,9,10]

kumar=['zero','one','two','three','four','five','six','seven','eight','nine','ten']

dict={}

for i in range(len(kiran)):

dict[i]=kumar[i]

# 3 answer

list1=[3,4,5,6,7,8]

list2=[]

for i in list1:

if i%2==0:

list2.append(i+10)

else:

list2.append(i\*5)

# 4 answer

p1='kiran'

p2='kumar'

talking=input("person name:")

if talking==p2:

print("hi mr."+p1+ " how are you")

print('i am fine mr.'+p2+" how do you do?")

else:

print("hi mr." +p2+ " how are you")

print('i am fine mr.'+p1+" how do you do?")