Conditional statements

- We want to execute python statements based on conditions
- For eaxmple:
  - I want to play cricket, If there is No rain
  - I want to eat icecream, If there is a Rain
- if
- if - else
- if-elif-else

Case-1

if

In [ ]:
```
# synatx

if <write some condition>:
    <code line1>
    <code line2>

# whenever if we start any line with keyword
# at the end of the line we have :
# whenever we have colon
# the next lines will start by maintaining some gap
# that gap is called as indentation
# keyword --- colon --- indentation
```

In [1]:
```
100>10
```

Out[1]:
```
True
```

In [ ]:
```
if 100>10:
    print('the answer is correct')

# step-1:  Condition 100>10:  True    if   True
# step-2: It is entering inside
#              inside print statement is therv : 'the answer is correct'
```

In [2]:
```
if 100<10:
    print('the answer is correct')
# Step-1: Condition 100<10 : False   if  False
# Step-2: The condition is false , the compiler will not enter inside the if blo
# No error - No asnwer
```

$mistake - 1$

- indentation error

- after : we are not providing any space

In [3]:
```
if 100>10:
print('hello')
```

```
  Cell In[3], line 2
    print('hello')
    ^
IndentationError: expected an indented block after 'if' statement on line 1
```

- what is the input number cell number : Cell In[3]
- what is the line : line 2
- where is the error : starting upcap

In [10]:
```
if 100>10:
    print('hello')
```

```
hello
```

In [ ]:
```
sir why it is only printing hello?
whats the use of if 100>10?

sultana: you want to play cricket
         condition: if<sultana can play cricket>

i want to print hello when 100>10 only
if 100>10:
    print('hello')

i want to a addition program when 100>10
a=10
b=20
c=a+b
print(c)
```

In [11]:
```
a=10
b=20
c=a+b
print(f"The addition of {a} and {b} is:{c}")
```

```
The addition of 10 and 20 is:30
```

In [13]:
```
if 100>10:
    a=10
    b=20
    c=a+b
    print(f"The addition of {a} and {b} is:{c}")
```

```
The addition of 10 and 20 is:30
```

In [14]:
```
# Area of traingle
# 0.5*breadth*height

breadth=eval(input('enter breadth:'))
height=eval(input("enter height"))
```

```
area=0.5*breadth*height
print(f"The area of traingle is :{area}")
```

```
The area of traingle is :300.0
```

In [15]:
```
if 2>10:
    a=10
    b=20
    c=a+b
    print(f"the addition value is {c}")
```

In [16]:
```
print('sandeep')
print('prajwal')
if 100<10:
    print('sultana')

# Think like computer
# step-1: sandeep
# step-2: prajwal
# step-3: 100<10:  False code will stop
```

```
sandeep
prajwal
```

In [ ]:
```
print('sandeep')
print('prajwal')
if 100>10:
    print('sultana')
    print('raj')
# step-1: sandeep
# step-2: prajwal
# step-3: 100>10   True ===== > inside the block
# step-4: sultana
# step-5: raj
```

In [17]:
```
print('sandeep')
print('prajwal')
print('hello')
####################################
if 100>10:
    print('sultana')
    print('raj')
####################################
print('bye')
print('katam zindagi')
```

```
sandeep
prajwal
hello
sultana
raj
bye
katam zindagi
```

In [18]:
```
print('sandeep')
print('prajwal')
print('hello')
####################################
if 100<10:
    print('sultana')
    print('raj')
```

```
###################################
print('bye')
print('katam zindagi')
```

```
sandeep
prajwal
hello
bye
katam zindagi
```

In [21]:
```
print('sandeep')
print('prajwal')
print('hello')
###################################
if 100>10:
    print('sultana')
    print('raj')
###################################
print('bye')
print('katam zindagi')
```

```
sandeep
prajwal
hello
sultana
raj
bye
katam zindagi
```

In [24]:
```
if 100<10:
    breadth=eval(input('enter breadth:'))
    height=eval(input("enter height"))
    area1=0.5*breadth*height

print(f"The area of traingle is :{area1}")
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[24], line 6
      3     height=eval(input("enter height"))
      4     area1=0.5*breadth*height
----> 6 print(f"The area of traingle is :{area1}")

NameError: name 'area1' is not defined
```

$mistake - 2$

In [30]:
```
if 100<10
```

```
  Cell In[30], line 1
    if 100<10
              ^
SyntaxError: expected ':'
```

$mistake - 3$

In [31]:
```
if:
  print('hello')
```

```
  Cell In[31], line 1
    if:
      ^
SyntaxError: invalid syntax
```

In [26]:
```
print('sandeep1')
print('rashid')
print('naresh')
if 1>10:
    print('sandeep2')
print('raj')
print('aparna')
#sandeep1
# rashid
# naresh
# if
```

```
sandeep1
rashid
naresh
raj
aparna
```

if-else

In [ ]:
```
# syntax

#if <write your condition here>:
#     <line1>
#else:
#    <lines>
```

In [32]:
```
if 100>10:
    print("your condition is correct")
    print('You are in')
else:
    print("your condition is wrong")
    print("you are out")

# step-1:  if   100>10   if  True
# step-2:  your condition is correct
# step-3: You are in
```

```
your condition is correct
You are in
```

In [33]:
```
if 100<10:
    print("your condition is correct")
    print('You are in')
else:
    print("your condition is wrong")
    print("you are out")

# step-1:  if  100<10  False === not enter inside
# step-2:  else block
# step-3:  your condition is wrong
# step-4:   you are out
```

```
your condition is wrong
you are out
```

In [34]:
```
print("Hello")
if 100<10:
    print("your condition is correct")
    print('You are in')
else:
    print("your condition is wrong")
    print("you are out")
print("bye")
```

```
Hello
your condition is wrong
you are out
bye
```

In [35]:
```
print("Hello")
print(1)
if 100>10:
    print("your condition is correct")
    print('You are in')
else:
    print("your condition is wrong")
    print("you are out")
print("bye")
print(2)
```

```
Hello
1
your condition is correct
You are in
bye
2
```

In [38]:
```
print("Hello")
if 100<10:
    print("your condition is correct")
    print('You are in')
print("why you are in middile")
else:
    print("your condition is wrong")
    print("you are out")
print("bye")
```

```
  Cell In[38], line 6
    else:
    ^
SyntaxError: invalid syntax
```

In [5]:
```
if 100<10:
    print('Okay')

print("Thank you!")
```

```
Thank you!
```

In [3]:
```
if 100<10:
    print('okay')
else:
    print('not okay')
```

```
not okay
```

In [4]:
```
if 100>10:
    print('okay')
print("why you are here?")
else:
    print('not okay')
```

```
  Cell In[4], line 4
    else:
    ^
SyntaxError: invalid syntax
```

In [6]:
```
if 100>10
```

```
  Cell In[6], line 1
    if 100>10
              ^
SyntaxError: expected ':'
```

In [ ]:
```
#WAP ask the user enter two numbers
# print the greatest number

# Idea
# step-1: Take the number1 = eval
# step-2: Take the number2= eval
# step-3: if <cond>:
# step-4     print()
# step-5: else:
# step-6:    print()
```

In [7]:
```
n1=eval(input("enter the number1:"))
n2=eval(input("enter the number2:"))
if n1>n2:
    print(f"the greatest number is: {n1}")
else:
    print(f"the greatest number is: {n2}")
```

```
the greatest number is: 50
```

In [ ]:
```
# WAP ask the user enter the distance
# if the distance > 25, then ask the user enter the charge
# and print the total charge
# otherwise (distance<25) print free ride
# Idea:
# Step-1: distance=eval()
# Step-2: if <cond>:
# step-3:    charge=eval()
# step-4:    total charge= dist*charge
# step-5: else:
# step-6:  print free ride
```

In [11]:
```
distance=eval(input("enter the distance:"))
if distance>=25:
    charge=eval(input("enter the charge:"))
    total_charge=distance*charge
    print("Total charge is:",total_charge)
else:
    print("Enjoy the free ride")
```

```
Enjoy the free ride
```

In [18]:
```
distance=eval(input("enter the distance:"))
if distance<25:
    print("Free ride")

else:
    charge=eval(input("enter the charge:"))
    total_charge=distance*charge
    print("Total charge is:",total_charge)
```

```
Total charge is: 500
```

In [ ]:
```
#Q3)till 25 free ride
#after 25 km
#you need to take those upper value
#100km
#100-25=75km

#Idea
# Step-1: calcuate the distance you want to travel
#         tarvel_distance= eval()
# Step-2: free_distance=25km
# Step-3: if travel_distance>free_distance:
#          amount_distance= travel_distance-free_distance
#          charge=
#          total charge
# step-4: else:
#           free ride
```

In [19]:
```
travel_distance=eval(input("enter the distance you want travel:"))
free_distance=eval(input("Enter the distance which govt is giving free:"))
if travel_distance>free_distance:
    amount_distance=travel_distance-free_distance
    charge=eval(input("enter the charge:"))
    total_charge=amount_distance*charge
    print("Total charge is:",total_charge)

else:
    print("Enjoy free ride")
```

```
Total charge is: 750
```

In [ ]:
```
# Daughter: hey Mom
# Mom:  Hi beta
# D: Mom do you know govt has given free ride for us
# Mom: Achaa great
# D: then we will go to grandmother house
# Cond: show me your id card
# Mom: No we dont have ide card, my dau has
# Cond: For you we will take money, for your datuget is free ride
# Mom: how much charge
# Cond: how much distance youwant travel
# distance= eval(input("Mom says:"))
# if distance>25:
#      charge= eval(input('conductor says cahrge'))
#      toatl charge
# else:
#     print(Free ride)
```

In [22]:
```
import time
print("Daughter: Hey mom")
```

```
time.sleep(2)
print('Mom: Hi beta')
time.sleep(2)
print('Daughter: Mom do you know govt has given free ride for us')
time.sleep(2)
print('Mom: Acha great')
time.sleep(2)
print('Daughter: Then we will go to Grandmother house')
time.sleep(2)
print('Cond: Show me your id card')
time.sleep(2)
print('Mom: No we dont have id card, my daughter has')
time.sleep(2)
print('Cond: For you we will take money, for your daughter is free ride')
time.sleep(2)
print('Mom: How much charge')
time.sleep(2)
print('Cond: How much distance you want to travel')
time.sleep(2)
distance=eval(input('Mom: Distance I want to Travel: '))
if distance>25:
    charge=eval(input('Cond: Charge is: '))
    total_charge=distance*charge
    print(f'Cond: Total charge you have to pay is: {total_charge}')
else:
    print('You are eligible for free ride')
```

```
Daughter: Hey mom
Mom: Hi beta
Daughter: Mom do you know govt has given free ride for us
Mom: Acha great
Daughter: Then we will go to Grandmother house
Cond: Show me your id card
Mom: No we dont have id card, my daughter has
Cond: For you we will take money, for your daughter is free ride
Mom: How much charge
Cond: How much distance you want to travel
Cond: Total charge you have to pay is: 200
```

In [ ]:
```
# eval is using
# why not float

# is eval takes the user input: No
#       input will take the user value from the keyboard

# you are giving the direct numerical values to the eval
#       eval is math family
#       direct numbers means already same family
#       No need to provide direct values

# You are giving english inside the eval
#       eval is math family
#       english letters english family
#       should not provide
```

In [1]:
```
float('1.5'),float('1')
```

Out[1]: (1.5, 1.0)

In [2]:
```
int('1')
```

Out[2]: 1

In [3]:
```
eval('1.5'),eval('1')
```

Out[3]: (1.5, 1)

In [4]:
```
float('1.5'),float('1')
```

Out[4]: (1.5, 1.0)

In [ ]:
```
float('1.5'),int('1')
eval('1.5'),eval('1')
```

In [5]:
```
input()
```

Out[5]: '1.5'

In [ ]:
```
eval('1.5')
eval(input())
```

In [7]:
```
eval('2')
```

Out[7]: 2

In [8]:
```
eval('python')
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[8], line 1
----> 1 eval('python')

File <string>:1

NameError: name 'python' is not defined
```

In [ ]:
```
#WAP ask the user enter two numbers
# print the greatest number

# Idea
# step-1: Take the number1 = eval
# step-2: Take the number2= eval
# step-3: if <cond>:
# step-4     print()
# step-5: else:
# step-6:    print()
```

In [ ]:
```
distance=eval(input("enter the distance:"))
if distance>=25:
    charge=eval(input("enter the charge:"))
    total_charge=distance*charge
    print("Total charge is:",total_charge)
else:
    print("Enjoy the free ride")
```

In [ ]:
```
#Q3)till 25 free ride
#after 25 km
#you need to take those upper value
#100km
#100-25=75km

#Idea
# Step-1: calcuate the distance you want to travel
#         tarvel_distance= eval()
# Step-2: free_distance=25km
# Step-3: if travel_distance>free_distance:
#          amount_distance= travel_distance-free_distance
#          charge=
#          total charge
# step-4: else:
#           free ride
```

In [ ]:
```
# 5)wap ask the user
# enter course name
# enter institute name
# if course name equal to data sceience
# and institute name equal to naresh it
# then print good
# other wise print bad
# Idea
# Step-1: course_name=input()
# Step-2: inst_name= input()
# Step-3: if course_name=='' and inst_name==''
# Step-4:     print()
# Step-5: else
# Step-6:    print()
```

In [10]:
```
c_name=input()
i_name=input()
# var='d'
if c_name=='data science' and i_name=='naresh it':
    print('Good')
else:
    print('Bad')
```

```
Bad
```

In [13]:
```
c_name=input()
i_name=input()
if c_name=='data science' or i_name=='naresh it':
    print('Good')
else:
    print('Bad')
```

```
Bad
```

In [14]:
```
c_name=input()
i_name=input()
pref_course_name='data science'
pref_inst_name='naresh it'
if c_name==pref_course_name and i_name==pref_inst_name:
    print('Good')
else:
    print('Bad')
```

```
Good
```

In [ ]:
```
name='python'
name=='python'
```

In [ ]:
```
var='data science'
var1='naresh it'
course_name=input('Enter Course Name: ')
institute_name=input('Enter Institute Name: ')

if course_name==var and institute_name==var1:
    print('Good')
else:
    print('Bad')
```

In [15]:
```
print('hello')
if 100>10:
    print('bye')
```

```
hello
bye
```

In [16]:
```
100>10
```

Out[16]:
```
True
```

In [17]:
```
print('hello')
if True:
    print('bye')
```

```
hello
bye
```

In [18]:
```
print('hello')
if False:
    print('bye')
```

```
hello
```

In [19]:
```
print('hello')
if True:
    print('bye')
    print(5/2)
    print(0/0)
    print('hai')
    print('good')
```

```
hello
bye
2.5
---------------------------------------------------------------------------
ZeroDivisionError                         Traceback (most recent call last)
Cell In[19], line 5
      3 print('bye')
      4 print(5/2)
----> 5 print(2/0)
      6 print('hai')
      7 print('good')

ZeroDivisionError: division by zero
```

In [ ]:
```
5/2  # 2.5 Normal division
5//2 # 2   floor division
5%2  # 1   modulus

Modulus takes the remainder
Normal division gives normal divison value
Floor division takes the round of the quotient
```

In [ ]:
```
# Q6)
# Ask the user take the number from keyboard
# print the number is even or odd

# Idea: any number divide with 2 , the reminder is zero
#       then it is an even
# Step-1: num=eval(input())
# Step-2: if <con>:
# Step-3:     print()
# Step-4: else:
# Step-5:    print()
```

In [21]:
```
num=eval(input("Enter the number:"))
if(num%2==0):
    print(f'{num} is an even number')
else:
    print(f'{num} is an odd number')
```

```
33 is an odd number
```

In [ ]:
```
# Q7)
# Ask the user get a random number between 1 to 100
# print the number is even or odd

# Idea: any number divide with 2 , the reminder is zero
#       then it is an even
# import random
# Step-1: num=<ranom number>
# Step-2: if <con>:
# Step-3:     print()
# Step-4: else:
# Step-5:    print()
```

In [27]:
```
import random
num=random.randint(1,100)
if(num%2==0):
    print(f'{num} is an even number')
else:
    print(f'{num} is an odd number')
```

```
54 is an even number
```

Concentrate how we are providing the numbers

- we can provide hard code: **direct value**
- we can provide from keyboard: **input**
- we can provide randomly : **using random package**

In [ ]:
```
num=10
if(num%2==0):
    print(f'{num} is an even number')
else:
    print(f'{num} is an odd number')

num=eval(input("Enter the number:"))
if(num%2==0):
    print(f'{num} is an even number')
else:
    print(f'{num} is an odd number')

import random
num=random.randint(1,100)
if(num%2==0):
    print(f'{num} is an even number')
else:
    print(f'{num} is an odd number')
```

In [ ]:
```
#Q8)
# WAP ask the user get a random integer number(n1) between 1 to 10
#     ask the user take another number(n2) from keyboard
# if n1 equal to n2
#     print won
# else
#    print loss

# Step-1: n1=random number
# Step-2: n2=eval(input())
# step-3: if <con>:
# Step-4:     print('won')
# Step-5: elsse:
# Step-6:    print('loss')
```

In [33]:
```
import random
n1=random.randint(1,10)
n2=eval(input("Enter the number:"))
if n1==n2:
    print("you won")
else:
    print("you loss")
```

```
5
you won
```

In [ ]:
```
- Till now we have seen if-else

- two outputs based on one condition

- there are three outputs based on two conditions

- if -elif-else

- if con:
     statements
- elif con
     statements
- else:
    statements
```

In [ ]:
```
#9) WAP ask the user enter a number
#      if num equal to one then print ('one')
#      if num equal to 2 then print ('two')
#      if num equal to 3 then print ('three')
#      if num equal to 4 then print ('four')
# if-elif-elif-else
```

In [2]:
```
num=eval(input("enter the number:"))
if num==1:
    print('one')
elif num==2:
    print('two')
elif num==3:
    print('three')
elif num==4:
    print("Four")
else:
    print("Enter a valid number")
```

```
Enter a valid number
```

In [3]:
```
num=input("enter the number:")
if num=='1':
    print('one')
elif num=='2':
    print('two')
elif num=='3':
    print('three')
elif num=='4':
    print("Four")
else:
    print("Enter a valid number")
```

```
Enter a valid number
```

In [6]:
```
num=3
if num==1:
    print('one')

if num==2:
    print('two')

if num==3:
    print('three')
```

```
three
```

In [ ]:
```
# WAP ask the user enter a percentage
# if the per greater than 90  print Garde A
# if the per greater between 75 to 90  print Garde B
# if the per greater between 60 to 75  print Garde C
# if the per greater between 40 to 60  print Garde D
# if the per greater between less than 40  print fail
```

In [10]:
```
percentage=eval(input("Enter the percentage: "))
if percentage>=90:
    print("Grade A")
elif percentage>=75 and percentage<90:
    print("Grade B")
elif percentage>=60 and percentage<75:
    print("Grade c")
elif percentage>=40 and percentage<65:
    print("Grade D")
else:
    print("fail")
```

```
Grade A
```

In [16]:
```
percentage=eval(input("Enter the percentage betwwn 0 to 100: "))
if percentage>=90:
    print("Grade A")
elif percentage>=75 :
    print("Grade B")
elif percentage>=60 :
    print("Grade c")
elif percentage>=40 :
    print("Grade D")
else:
    print("fail")
# Step-1 : Per =79
# Step-2: if 79>=99    False
# Step-3: elif 79>=75  True
# Step-4: elif 79>=60  True
# Step-5: elif 79>=40  True
```

```
Grade A
```

- whenever we use if-elif code will stop first True condition only
- For example in above code per=99
- It satisfy all the conditions but first one only print
- that is the first true value

In [18]:
```
percentage=eval(input("Enter the percentage betwwn 0 to 100: "))
if False:
    print("Grade A")

if percentage>=75 :
    print("Grade B")#

if percentage>=60 :
    print("Grade c")
```

```
if percentage>=40 :
    print("Grade D")
else:
    print("fail")
```

```
Grade B
Grade c
Grade D
```

In [ ]:
```
# WAP ask the user enter a age
# if the age greater than 100  print unlucky
# if the age greater between 60 to 100  print SS
# if the age greater between 30 to 60  print Middile aged
# if the age greater between 20 to 30  print Young
# if the age greater between 10 to 20  print teenage
# otherwise print kid
```

In [19]:
```
age=eval(input('Enter the age: '))
if age>100:
    print("Unlucky person")
elif age>=60:
    print("Senior Citizen")
elif age>=30:
    print("Middle age")
elif age>=20:
    print("Young age")
elif age>=10:
    print("Teenage")
else:
    print("Kid")
```

```
Middle age
```

In [ ]:
```
# WAP ask the user enter the distance
# If the distance is greater than 50
#        ask the user charge (enter 10)
#        print the total charge
# If the distance is between 25 to 50
#        ask the user charge = 5
#        print the total charge
# If the distance is between 10 to 25
#        ask the user charge = 2
#        print the total charge
# else free ride
```

In [23]:
```
distance=eval(input("Enter the distance: "))
if distance>=50:
    charge=eval(input("Enter  charge "))
    print(distance*charge)
elif distance>=25:
    charge=eval(input("Enter  charge "))
    print(distance*charge)
elif distance>=10:
    charge=eval(input("Enter  charge "))
    print(distance*charge)
else:
    print("Free ride")
```

```
30
```

In [ ]:
```
# Ask the user number1
# Ask the user number2
# print statemets
#  enter 1 for addition opertation
#  enter 2 for sub opertation
#  enter 3 for mul opertation
#  enter 4 for div opertation
# ask the user operation=eval(input())
# if operation equal to 1 then print a+b
# if operation equal to 2 then print a*b
# if operation equal to 3 then print a-b
# if operation equal to 4 then print a/b
# else print enter valid operation
```

In [27]:
```
import time
a=eval(input("Enter first number."))
b=eval(input("Enter second number."))

print("Enter 1 for: addition")
time.sleep(1)
print("Enter 2 for: subtraction")
time.sleep(1)
print("Enter 3 for: multiplication")
time.sleep(1)
print("Enter 4 for: division")

option=eval(input("Enter the operation:"))

if option==1:
    print(f"The addition of {a} and {b} is {a+b}")

elif option==2:
    print(f"The subtraction of {a} and {b} is {a-b}")

elif option==3:
    print(f"The multiplication of {a} and {b} is {a*b}")

elif option==4:
    print(f"The division of {a} and {b} is {a/b}")

else:
    print("Enter a valid operation")
```

```
Enter 1 for: addition
Enter 2 for: subtraction
Enter 3 for: multiplication
Enter 4 for: division
Enter a valid operation
```

In [ ]:
```
n1 = eval(input("Enter a number: "))
n2 = eval(input("Enter another number: "))
op = input("Enter 1 for add 2 for sub 3 for mul 4 for div: ")
if op=='1':
    print(n1+n2)
elif op=='2':
    print(n1-n2)
elif op=='3':
    print(n1*n2)
elif op=='4':
```

```
    print(n1/n2)
else:
    print("Enter valid operation!")
```

In [29]:
```
a=eval(input("enter the number 1 :"))
b=eval(input("enter the number 2 :"))
exp=input("enter the opeator from this [+,-, *, /] to perform operation :")
if exp=="+":
    print("the addition is :",a+b)
elif exp=="-":
    print("the minus is :",a-b)
elif exp=="*":
    print("the multiiplication is :",a*b)
elif exp=="/":
    print("the divisioin is :",a/b)
else:
    print("invalid operator")
```

```
the multiiplication is : 4800
```

In [35]:
```
# WAP ask the user enter a number
# if the number greater than eqaul to zero
#        if number equal to zero
#               print it is a zero
#        else
#              print it is a pos number
#else
#    print it is a negative number

number=eval(input("enter the number:"))
if number>=0:
    if number==0:
        print("It is a zero number")
    else:
        print("It is a pos number")
else:
    print("It is a negative ")
```

```
It is a zero number
```

In [32]:
```
num1= eval(input("Please enter first number: "))
num2= eval(input("Please enter second number: "))
operation=input("Please enter operation like +,-,*,/ or number like 1,2 3,4:")
if operation=="1" or operation=="+":
    addition=num1+num2
    print(f"Summation of {num1} and {num2} is :{addition}")
elif operation=="2" or operation=="-":
    substraction=num1-num2
    print(f"substraction of {num1} and {num2} is :{substraction}")
elif operation=="3" or operation=="*":
    multiplication=num1*num2
    print(f"multiplication of {num1} and {num2} is :{multiplication}")
elif operation=="4" or operation=="/":
    division=num1/num2
    print(f"division of {num1} and {num2} is :{division}")
else:
    print("Please enter valid opetration")
```

```
multiplication of 100 and 200 is :20000
```

In [ ]:
```
# wap
# ask the user enter gender
# if gender equal to male
#       ask the user enter age
#       if age gretaer than 60 print ss
#       if age greater between 30 to 60 priny MM
#       if age betweeen 10 to 20  print young man
#       otherwise print Boy
# if gender equal to Female
#       ask the user enter age
#       if age gretaer than 60 print ss
#       if age greater between 30 to 60 priny MW
#       if age betweeen 10 to 20  print young Girl
#       otherwise print Girl
# Otherwise print enter a valid gender
```

In [38]:
```
gender = input('Please enter your gender, enter m for male and f for female')
if gender == 'm':
    age = eval(input('Please enter your age'))
    if age >=60:
        print('senior citizen')
    elif age >=30:
        print('middle aged')
    elif age >=10:
        print('young man')
    else:
        print('kid')
elif gender == 'f':
    age = eval(input('Please enter your age'))
    if age >=60:
        print('senior citizen')
    elif age >=30:
        print('middle aged')
    elif age >=10:
        print('young women')
    else:
        print('kid')
else:
    print('invalid gender')
```

```
invalid gender
```

In [ ]:
```
# WAP
# Ask the user enter n1
#                    n2
#                    n2
# find the greatest value
```