```
1 r=float(input("Enter r:"))
2 area=3.14*r**2
   print("Area:",area)
   Enter r:5.6
   Area: 98.4704
1 r=float(input("Enter r:"))
   print("Area:",3.14*r**2)
   Enter r:5.6
   Area: 98.4704
print("Area:",3.14*float(input("Enter r:"))**2)
   Enter r:5.6
   Area: 98.4704
print("Area of Rectangle:",float(input("Enter 1:"))*float(input("Enter b:")))
   Enter 1:7.8
   Enter b:11
   Area of Rectangle: 85.8
   p=float(input("Enter Amount:"))
   r=float(input("rate of interest:"))
3 t=float(input("Enter time in years0:"))
   a=p*(1+r/100)**t
5 print("Compound interest:",a-p)
   Enter Amount:0
   rate of interest:0
   Enter time in years:9
   Compound interest: 0.0
1 import math
1 math.inf
   inf
1 math.sqrt(121)
   11.0
1 121**0.5
   11.0
```

```
1 x=10
2 x<<2
   40
1 x=10
2 x>>2
   2
1 ~(-1234)
   1233
1 no=int(input("Enter a number:"))
2 if no>=0:
      print("Entered if")
      print("Accept it")
     print("Exiting if")
6 print("done")
      File "<ipython-input-24-7fc14bcb2ee3>", line 6
        print("done")
   IndentationError: unexpected indent
     SEARCH STACK OVERFLOW
1 no=int(input("Enter a number:"))
2 if no>=0:
      print("Accept it")
4 else:
      print("Rejected it")
6 print("done")
   Enter a number:-99
   Rejected it
   done
1 if:
2 elif:
3 elif:
4 elif:
5 else:
      File "<ipython-input-28-774f1dd50554>", line 1
        if
   SyntaxError: invalid syntax
     SEARCH STACK OVERFLOW
```

```
1 #+ve or -ve
 2 no=int(input("Enter a number:"))
 3 if no>=0:
 4
      print(no,"is +ve")
 5 else:
      print(no,"is -ve")
 7
    Enter a number:-0
    0 is +ve
 1 # +ve 0 or -ve
 2 no=int(input("Enter a number:"))
 3 if no>0:
 4
      print(no,"is +ve")
 5 elif no<0:
 6
      print(no,"is -ve")
 7 else:
      print(no,"is zero")
 9
    Enter a number:0
    0 is zero
 1 #rear 2 numbers and print smaller also check for both equal
 2 no1=int(input("Enter a number:"))
 3 no2=int(input("Enter another number:"))
 4 if no1<no2:
 5
      print(no1,"is minimum")
 6 elif no2<no1:
      print(no2,"is minimum")
 8 else:
      print(no1,no2,"are equal")
    Enter a number:9
    Enter another number:9
    9 9 are equal
 1 #print passing class given percentage
 2 # p>60:first
 3 # 50<=p<60:Second
 4 # 40<=p<50:Third
 5 # p<40:fail
 6 p=float(input("Enter Percentages:"))
 7 if p>=60:
      print("First class")
9 elif p>=50:
10
      print("Second class")
11 elif p>=40:
12
      print("Third class")
13 else:
      print("Fail")
    Enter Percentages:76.9
```

https://colab.research.google.com/drive/1prsg6OzCwlQID wTDMx3sud7QG4voaax#printMode=true

First class

```
1 i=0
2 while i<=3:
3 print(i)
4 i+=1
5 print("Finally i is:",i)
    0
    1
    2
    Finally i is: 4
1 # 10,20,30... 100
2 # 10,9,8, 1
3 # 1 to n where n enter by user n>0
4 # print series start to end
5 start:3 end:5 3,4,5
6 start:2 end:-2 2,1,0,-1,-2
1
1 # 10,20,30... 100
2 i=10
3 while i<=100:
4 print(i)
5 i+=10
6 print("Finally i is:",i)
    10
    20
    30
    40
    50
    60
    70
    80
    90
    100
    Finally i is: 110
1 #10,9,8 1
2 i=10
3 while i>=1:
     print(i)
    i-=1
    10
    9
    8
    7
    6
    5
```

```
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```

3 2 1

```
1 # 1 to n
 2 n=int(input("Enter n:"))
 3 i=1
 4 while i<=n:
 5
      print(i)
 6 i+=1
    Enter n:7
    1
    2
    3
    4
    5
    6
 1 '''print series start to end
 2 start:3 end:5 3,4,5
      start:2 end:-2 2,1,0,-1,-2'''
 4 start,end=int(input("Enter start:")),int(input("Enter End:"))
 5 if start<end:#counter</pre>
 6
     i=start
 7
      while i<=end:
 8
          print(i,",",end='')
 9
          i+=1
10 else:
11
     i=start
12
      while i>=end:
13
          print(i,",",end='')
14
          i-=1
    Enter start:3
    Enter End:-4
    3 ,2 ,1 ,0 ,-1 ,-2 ,-3 ,-4 ,
 1 while True:
 2
      no=input("Enter a number:")
      if no=='':
          break
 5 print("Tnaks for using code.")
    Enter a number:11
    Enter a number:-22
    Enter a number:34
    Enter a number:77
    Enter a number:123456
    Enter a number:8765432
    Enter a number:0
    Enter a number:
    Tnaks for using code.
```

1.tea 2.coffe 3.cold drink 0.exit 2 Have coffe

1.tea 2.coffe 3.cold drink 0.exit 3

Have cold drink

```
1 while True:
      no=int(input("Enter a number:"))
 3
      if no==28:
 4
          break
 5 print("Thaks for using code.")
    Enter a number:22
    Enter a number:11
    Enter a number:0
    Enter a number:29
    Enter a number:28
    Thaks for using code.
 1 #1.tea 2.coffe 3. cold drink 0.exit ---Error
 2 while True:
 3
      #menu
      print("\n1.tea\n2.coffe\n3.cold drink\n0.exit\n:")
 5
 6
      ch=int(input(""))
 7
      #conditional if elif elif else(error)
 8
      if ch==1:
 9
          print("Have tea")
10
      elif ch==2:
11
          print("Have coffe")
12
      elif ch==3:
13
          print("Have cold drink")
14
      elif ch==0:
15
          print("Thanks for using code:")
16
          break
17
      else:
18
          print("Wrong Choice")
    1.tea
    2.coffe
    3.cold drink
    0.exit
    1
    Have tea
```

1.tea

```
1.tea
    2.coffe
    3.cold drink
    0.exit
     Wrong Choice
    1.tea
    2.coffe
    3.cold drink
    0.exit
    0
 1 #1.tea 2.coffe 3. cold drink 0.exit ---Error
 2 total=0
 3 ct=cc=cd=0
 4 while True:
 5
       #menu
 6
       print("\n1.tea\n2.coffe\n3.cold drink\n0.exit\n:")
 7
       #input
 8
       ch=int(input(""))
 9
       #conditional if elif elif else(error)
10
      if ch==1:
11
          ct+=1
12
          print("Have tea")
13
       elif ch==2:
14
          cc+=1
          print("Have coffe")
15
16
       elif ch==3:
17
          cd+=1
18
          print("Have cold drink")
19
       elif ch==0:
20
          total=ct*10+cc*15+cd*30
21
          print("Total business:",total,"\nTea:",ct," Coffee:",cc," Cold Drink:",cd)
22
23
       else:
24
          print("Wrong Choice")
    1.tea
    2.coffe
    3.cold drink
    0.exit
    Have tea
    1.tea
    2.coffe
    3.cold drink
    0.exit
    1
    Have tea
```

```
2.coffe
    3.cold drink
    0.exit
    :
    1
    Have tea
    1.tea
    2.coffe
    3.cold drink
    0.exit
    2
    Have coffe
    1.tea
    2.coffe
    3.cold drink
    0.exit
    2
    Have coffe
    1.tea
    2.coffe
    3.cold drink
    0.exit
    3
    Have cold drink
    1.tea
    2.coffe
    3.cold drink
    0.exit
    0
    Total business: 90
    Tea: 3 Coffee: 2 Cold Drink: 1
 1 #1.tea 2.coffe 3. cold drink 0.exit ---Error
 2 total=0
 3 ct=cc=cd=0
 4 while True:
 5
      #menu
 6
      print("\n1.tea\n2.coffe\n3.cold drink\n0.exit\n:")
 7
      #input
 8
      ch=int(input(""))
 9
      #conditional if elif elif else(error)
10
      if ch==1:
11
          ct+=1
12
          total+=10
13
          print("Have tea")
14
      elif ch==2:
15
          cc+=1
16
          total+=15
17
          print("Have coffe")
18
      elif ch==3:
19
          cd+=1
```

```
20
          total+=30
21
          print("Have cold drink")
22
      elif ch==0:
23
          print("Total business:",total,"\nTea:",ct," Coffee:",cc," Cold Drink:",cd)
24
25
      else:
          print("Wrong Choice")
26
    1.tea
    2.coffe
    3.cold drink
    0.exit
    :
    1
    Have tea
    1.tea
    2.coffe
    3.cold drink
    0.exit
    1
    Have tea
    1.tea
    2.coffe
    3.cold drink
    0.exit
    :
    1
    Have tea
    1.tea
    2.coffe
    3.cold drink
    0.exit
    :
    2
    Have coffe
    1.tea
    2.coffe
    3.cold drink
    0.exit
    2
    Have coffe
    1.tea
    2.coffe
    3.cold drink
    0.exit
    Have cold drink
    1.tea
    2.coffe
    3.cold drink
    0.exit
```

```
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     2 no=121
     3 tno=no
```

```
Total business: 90
    Tea: 3 Coffee: 2 Cold Drink: 1
 1 #Armstrong 153=1^3+5^3+3^3
 4 sum=0
 5 while no>0:
 6 d=no%10
 7 no=no//10
 8 sum=sum+d**3
 9 if sum==tno:
10
      print("Yes it is")
11 else:
12
      print("No it is not")
13
14
    No it is not
 1 no=12345
```

2 while no>0: 3 d=no%10 4 no=no//10 print(no,d) 1234 5

```
1 no=121
 2 tno=no
 3 rno=0
 4 while no>0:
 5 d=no%10
 6 no=no//10
 7
     rno=rno*10+d
 8
      print("no:",no,"rno",rno)
 9 if rno==tno:
10
     print("Yes")
11 else:
12 print("No")
```

no: 12 rno 1 no: 1 rno 12 no: 0 rno 121 Yes