*# ASSIGNMENT 01*Basic\_pay = int(input(**"Enter the value of Basic Pay \n"**))  
hra = Basic\_pay\*0.1  
ta = Basic\_pay\*0.05  
sal = Basic\_pay + hra + ta  
tax = sal\*0.02  
net\_sal = sal - tax  
print(**"Net Salary of employee"**, net\_sal)

OUTPUT:

Enter the value of Basic Pay

100000

Net Salary of employee 112700.0

Process finished with exit code 0

*# ASSIGNMENT 02*mass = float(input(**"Enter the value of mass \n"**))  
velocity = float(input(**"Enter the value of velocity \n"**))  
momentum = mass\*velocity\*\*2  
print(**"momentum is "**, momentum)

OUTPUT:

Enter the value of mass

100

Enter the value of velocity

200

momentum is 4000000.0

Process finished with exit code 0

*# ASSIGNMENT 03*num = []  
n = int(input(**"Enter the value of n :\n"**))  
**for** i **in** range(n):  
 print(**"enter"**, i+1, **"number"**)  
 ele = float(input())  
 num.append(ele)  
print(**"maximum of numbers is: "**,max(num))  
print(**"minimum of numbers is: "**,min(num))  
print(**"sum of numbers is: "**,sum(num))  
print(**"Avarage of numbers is: "**,(sum(num)/n))

OUTPUT:

Enter the value of n :

3

enter 1 number

1

enter 2 number

2

enter 3 number

3

maximum of numbers is: 3.0

minimum of numbers is: 1.0

sum of numbers is: 6.0

Avarage of numbers is: 2.0

Process finished with exit code 0

*#ASSIGNMENT 04*nums = []  
**for** i **in** range(5):  
 print(**"enter"**, i+1, **"subject score"**)  
 ele = int(input())  
 **if**(ele >100 **and** ele<0):  
 print(**"Invalid marks"**)  
 **break  
 elif**(ele<40):  
 **break** nums.append(ele)  
total = sum(nums)/5  
**if** (total > 75):  
 print(**"Distinct with total marks : "**, total)  
**elif** (total >= 60 **and** total < 75):  
 print(**"First Division with total marks : "**, total)  
**elif** (total >= 50 **and** total < 60):  
 print(**"second divsion with total marks : "**, total)  
**elif** (total >= 40 **and** total < 50):  
 print(**"third division with total marks : "**, total)  
**else**:  
 print(**"Fail"**)

OUTPUT:

enter 1 subject score

60

enter 2 subject score

70

enter 3 subject score

80

enter 4 subject score

90

enter 5 subject score

100

Distinct with total marks : 80.0

Process finished with exit code 0

*#ASSIGNMENT 09*print(input()[::-1])

OUTPUT:

123

321

Process finished with exit code 0

*#ASSIGNMENT 12 (list)*n = int(input(**"Enter the value of n :\n"**))  
print(**"Now Enter the numbers :\n"**)  
even = []  
odd = []  
**for** i **in** range(n):  
 ele = int(input())  
 **if** (ele%2==0):  
 even.append(ele)  
 **else**:  
 odd.append(ele)  
print(even)  
print(odd)

OUTPUT :

Enter the value of n :

5

Now Enter the numbers :

1

2

3

4

5

[2, 4]

[1, 3, 5]

Process finished with exit code 0

*#ASIGNMENT 05***def** check(n):  
 sum = 0  
 **for** i **in** range(len(n)):  
 sum = sum + int(n[i]) \*\* 3  
 **if** (sum == int(n)):  
 **return True  
 else**:  
 **return False**n = input(**"Enter a number: "**)  
print(check(n))

OUTPUT:

Enter a number: 371

True

Process finished with exit code 0

*#ASSIGNMENT 06*

**def** add(a, b):  
 **return** a+b  
**def** sub(a, b):  
 **return** a-b  
**def** mul(a, b):  
 **return** a\*b  
**def** div(a, b):  
 **return** a/b  
**def** power(a, b):  
 **return** a\*\*b  
**def** fac(a):  
 c=1  
 **for** i **in** range(1, a+1):  
 c = c\*i  
 **return** c  
user = 1  
a = int(input(**"Enter the 1st number\n"**))  
b = int(input(**"Enter the 2nd number\n"**))  
**while**(user != 0):  
 print(  
 **"What you want to do?\nType 1 for add \nType 2 for subtration\nType 3 for Multiplication\nType 4 for Division\nType 5 for Exponent\nType 6 for Factorial"**)  
 ch = int(input())  
 **if** (ch == 1):  
 print(add(a, b))  
 **elif** (ch == 2):  
 print(sub(a, b))  
 **elif** (ch == 3):  
 print(mul(a, b))  
 **elif** (ch == 4):  
 print(div(a, b))  
 **elif** (ch == 5):  
 print(power(a, b))  
 **else**:  
 print(**"factorial of 1st number is :"**, fac(a))  
 user = int(input(**"press any key to continue and 0 to exit"**))

OUTPUT:

Enter the 1st number

3

Enter the 2nd number

2

What you want to do?

Type 1 for add

Type 2 for subtration

Type 3 for Multiplication

Type 4 for Division

Type 5 for Exponent

Type 6 for Factorial

1

5

press any key to continue and 0 to exit0

Process finished with exit code 0

*#Assignment 11***import** random  
n = int(input(**"How many numbers you want to generate:\n"**))  
**for** i **in** range(n):  
 print(random.randint(1,10))

OUTPUT:

How many numbers you want to generate:

4

5

7

6

3

Process finished with exit code 0

*# Assignment 14***def** convert(s):  
 decimal = 0  
 rno = s[ : : -1]  
 **for** i **in** range(len(rno)):  
 decimal = decimal + int(rno[i])\*(2\*\*i)  
 print(decimal)  
  
**def** main():  
 s = input(**"enter the binary number"**)  
 convert(s)  
main()

OUTPUT :

enter the binary number101111

47

Process finished with exit code 0

*#ASSIGNMRNT 15***def** length(s):  
 print(len(s))  
  
**def** rev(s):  
 print(s[::-1])  
  
**def** eq(s):  
 check = input(**"Enter string to check equality :\n"**)  
 **if** (s == check):  
 print(**"Yes"**)  
 **else**:  
 print(**"No"**)  
  
**def** palidrome(s):  
 **if** (s == s[::-1]):  
 print(**"Yes"**)  
 **else**:  
 print(**"No"**)  
  
**def** sub(s):  
 substr = input(**"Enter the a string to check substring:\n"**)  
 ind = s.find(substr)  
 **if** ind != -1:  
 print(**"yes"**)  
 **else**:  
 print(**"No"**)  
  
**def** main():  
  
 s = input(**"Enter a string:\n"**)  
 flag = 1  
 **while** flag ==1:  
 print(  
 **"press 1 to get length of string\n press 2 to get its reverse string\n press 3 to check palidrome\n press 4 to check a substring\n press 5 to check equality\n"**)  
 n = int(input(**"Enter a Number:\n"**))  
 **if** (n == 1):  
 length(s)  
 **elif** (n == 2):  
 rev(s)  
 **elif** (n == 3):  
 palidrome(s)  
 **elif** (n == 4):  
 sub(s)  
 **elif** (n == 5):  
 eq(s)  
 **else**:  
 print(**"invalid chooice"**)  
  
 con = int(input(**"Press 0 to stop\n"**))  
 **if**(con==0):  
 flag = 0  
  
main()

OUTPUT:

Enter a string:

abc

press 1 to get length of string

press 2 to get its reverse string

press 3 to check palidrome

press 4 to check a substring

press 5 to check equality

Enter a Number:

1

3

Press 0 to stop

0

Process finished with exit code 0

*#ASSIGNMENT 16***def** fileop(ch):  
 **with** open(**"test.txt"**, **"r"**) **as** f1:  
 contents = f1.read()  
 **if** ch== **'a'**:  
 contents = contents.replace(**'.'**, **','**)  
 **elif** ch== **'b'**:  
 contents = contents.upper()  
 **elif** ch== **'c'**:  
 contents = contents.lower()  
  
 **with** open(**"output.txt"**, **"w"**) **as** f2:  
 out = f2.write(contents)  
 **with** open(**"output.txt"**, **"r"**) **as** f3:  
 cout = f3.read()  
 print(cout)  
  
ch = **''  
while** ch **in 'abc'**:  
 ch = input(**"Enter a to replace . by ,\nEnter b to uppercase\nEnter c to lowercase\n"**)  
 **if** ch **in 'abc'**:  
 fileop(ch)  
 **else**:  
 print(**"Invalid operation"**)