

PYTHON ASSIGNMENT 1

CLASS XII CS

Q1. Find the output

<p>i. p=5/2 q=p*4 r=p+q p+=p+q+r q-=p+q*r print(p,q,r) ans(27.5 - 142.5 12.5)</p>	<p>ii. p=10 q=20 p*=q//3 q+=p+q**2 print(p,q) ans(60 480)</p>	<p>iii. a=(2+3)**3-6/2 b=(2+3)*5//4+(4+6)/2 c=12+(3*4-6)/3 d=12%5*3+(2*6)//4 print(a,b,c,d) ans(122.0 11.0 14.0 9)</p>	<p>iv. name='Neeru' age=21 print(name,"you are", age," now but",) print("you will be ", age+1," next year")</p>	<p>v. a,b,c=10,20,30 p,q,r=c-5,a+3,b-4 print('p ,q and r: ',p,q,r)</p>
--	--	---	---	--

<p>vi. a=10 x,x=a*10,a//2 print(x+1) ans(6)</p>	<p>vii. x,y=10,20 x,y=x+y,y-x print(x,y) ans(30 10)</p>	<p>viii. print("welcome",print("great India"),"to our Counter") ans great India welcome None to our Counter</p>	<p>ix. x=45,200 print(x) print(x[0],x[1]) ans (45, 200) 45 200 If comma separated value then tuple create</p>	<p>x. m=int(input("enter num")) ** 2 print(m) a=2**3**2 print(a) (It works from right to left ans-512)</p>
--	--	--	---	---

<p>xi. a=10 b=3 c=int(a/b) d=float(a//b) print(c,d) ans(3 3.0)</p>	<p>xii. c=65 print(chr(c)) print(chr(c+1)) print(chr(c+2)) ans A B C</p>
---	---

Q2. Write Python expressions:-

<p>i. $\frac{a+b}{2}$</p>	<p>ii. $\frac{3^2+9^3}{2}$</p>	<p>iii. $\frac{\sqrt{a} + a+2}{b}$</p>
--------------------------------------	---	---

Q3. What is the problem in the code:-

<p>i. Name="Prateek" Age=26 Print(Your name & age are",Name+age)</p>	<p>li. a=3 S=A=10 A="New" Q=A/10</p>
--	--

Q4. Define indentation.

Q5. Define string types.

Q6. Count the number of bytes for different strings

<p>i. print(len("Hello\n Fine"))</p>	<p>ii. print(len("""How\ are\n you\n """)) #ans is 13</p>	<p>#simple letter size : 1 #Non Graphic char size : 1 # \ symbol no size #\n :for carriage return which size is also : 1</p>
--------------------------------------	---	--

Check these concept also:-

- -10/3
- -10//3
- 10/3
- 10.5//3
- 10.5/3

Q7. Find the output:-

```

i.
b=9
a=8
if(a>b):
    a=a+5
a=a+2
print(a)

ii.
a,d=20,0
g=""
if(g=='F'or g=='f'):
    if(a>50):
        d=2000*10/100
    else:
        d=2000*8/100
print(d)

```

```

iii.
x,y,n=10,5,8
if(x+y*7 > x+y*n):
    print(x+y*7)
else:
    print(x+y*n)

```

ans-50**Find the value of d**

1. g is f **ans-160.0**
2. g is m **ans-0**

Q8. Write a program in Java to accept monthly salary from the user, find and display income tax with the help of following rules:

Monthly salary	income tax
19000 or more	40%
13500-18999	30%
13499 or less	20%

Q9. Display fee for dance course as:-

Rs. 600 for children aged 6-10

Rs. 1000 for children aged 11-16

For other than age an error message "Not Eligible"

Q10. Identify the invalid name. State the reason if invalid.

- i. 3name, ii. total amt iii. IF iv. A1

Q11. Datatypes of variables

- i. Marks of students
- ii. Grade of students('A','B','C')

Q12. First_name="Ayana"

- i. What is the datatype of First_name.
- ii. Is 325 the same as "321"? give reason.

Q13. Write comments using another way & explain about both comments type.

```

#this is comment spreading
#over two lines

```

Q14.

```

i.
m,n=1,0;
for m in range(1,16):
    if(m%5==0):
        n+=5
    print("n is",n," and m is", m)

```

```

ii.
sp=10
for r in range(1, 11):
    for s in range(1, sp):
        print(end=" ")
    for c in range(1, r+1):
        print("***2, end=" " ")
    sp-=1
    print()

```

Q16.While loop(WAP)

i.digit reverse(check palindrome)

ii.digit sum.

iii.armstrong number

```

iii.
j=0
for i in range(10,51,10):
    j=i/2
    print(int(j),end=' ')

iv.
print(0)
for i in range(1,4):
    for j in range(1,i+2):
        print(2**i, end=" ")
    print(end ="\n")

```

Q17.

y,x,p=3,5,0

while(y>0):

p=p+x

y=y-1

print(y,x,p)

ans-0 5 15

Q15. Sum the series:-

i)1+2+3+4+5.....n

ii)2+4+6+8.....n

iii)5+10+15.....n

iv)2²+ 4²+ 6²...n

v)1¹+2²-3³+4⁴....n

vi $1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5}$

vii) Fibonacci series

viii)From 1-20 series display prime numbers.