

PYTHON ASSIGNMENT 1

CLASS XII CS

Q1. Find the output

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|--|--|---|---|---|
| <p>i. p=5/2
q=p*4
r=p+q
p+=p+q+r
q-=p+q*r
print(p,q,r)</p> | <p>ii. p=10
q=20
p*=q//3
q+=p+q**2
print(p,q)</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)</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)</p> | <p>vii.
x,y=10,20
x,y=x+y,y-x
print(x,y)</p> | <p>viii.
print("welcome",print("great
India"),"to our Counter")</p> | <p>ix.
x=45,200
print(x)
print(x[0],x[1])</p> | <p>x. m=int(input("enter
num")) ** 2
print(m)
a=2**3**2
print(a)</p> <p>(if m input as 4)</p> |
| <p>xi.
a=10 b=3
c=int(a/b)
d=float(a//b)
print(c,d)</p> | <p>xii.
c=65
print(chr(c))
print(chr(c+1))
print(chr(c+2))</p> | | | |

Q2. Write Python expressions:-

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

Q3. What is the problem in the code:-

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

Q4. Find the output:-

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|---|--|---|
| <p>i.)
b=9
a=8
if(a>b):
 a=a+5
a=a+2
print(a)</p> | <p>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)</p> | <p>iii.)
x,y,n=10,5,8
if(x+y*7 > x+y*n):
 print(x+y*7)
else:
 print(x+y*n)</p> |
|---|--|---|

Q5. Identify the invalid name. State the reason if invalid.

- i) 3tata ii) total val iii) af123 iv) for v) If vi) am@345

Q6. Find the output:-

<p>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)</p>	<p>ii) j=0 for i in range(10,51,10): j=i/2 print(int(j),end='')</p>	<p>iii) print(0) for i in range(1,4): for j in range(1,i+2): print(2**i, end=" ") print(end="\n")</p>
<p>iv) 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()</p>	<p>v) y,x,p=3,5,0 while(y>0): p=p+x y=y-1 print(y,x,p)</p>	<p>vi) x = 45 while x < 50: print (x)</p>
<p>vii) count = 0 while count <10: print('Hello') count=count*2+1</p>	<p>viii) keepgoing=True x = 100 while keepgoing: print(x) x = x-10 if x < 50: keepgoing = False</p>	<p>ix) for x in [1,2,3,4,5]: print(x//2**2)</p>
<p>x) for p in range(1,10): print(p-1*2)</p>	<p>xi) for z in range(-500,500,100): print(z)</p>	<p>xii) x=10 y=5 for i in range(x-y*2): print("%",i)</p>
<p>xiii) c = 0 for x in range(10): for y in range(5): c += 1 print(c)</p>	<p>xiv) for x in 'kamp': print(str.upper(x))</p>	<p>xv) x = "apple,pear,peach" y = x.split(",") for z in y: print(z)</p>
<p>xvi) x = [1,2,3,4] counter = 0 while counter < len(x): print(x[counter] * '%') for y in x: print(y * '* ') counter+=1</p>	<p>xvii) for i in range(1,5,1): for j in range(i+1): if i%2==0: print('*',end='') else: print('#',end='') print()</p>	<p>xviii) for Name in ['Jay','Rup','Tarun','Suraj']: if Name[0]=='T' or Name[1]=='a': print(str.upper(Name)) else: print(len(Name))</p>

Q6. Find the output:-

```
a) y=str(123)
x = "hello"*3
print(x,y)
x="hello"+"world"
y=len(x)
print(y,x)
```

```
b) x = "hello" +
    "to Python" +
    "World"
for char in x :
    y = char
    print(y, ':')
```

```
c)
x = "hello world"
print(x[:2],x[:-2],x[-2:])
print(x[6],x[2:4])
print(x[2:-3],x[-4:-2])
```

```
d)
arr = [1,2,3,4,5,6]
for i in range(1,6)
    arr[i-1] =arr[i]
for l in range(0,6)
    print(arr[l],end= " ")
```

```
e)
Numbers=[9,18,27,36]
for Num in Numbers:
    for N in range(1, Num%8):
        print(N, "#",end=" ")
    print()
```

```
f)
values =[]
for i in range(1,4)
    values.append(i)
print(values)
```

Q 7. Find the errors, state reasons.

```
a) t=(1,"a",9.2)
t[0]=9
```

```
b) t = 'hello'
t[0]="H"
```

```
c) alst = {'a':1,'b':2,'c':3}
print(alst['a','b'])
```

Q 8. What are the tokens in Python ? How Many types of tokens are allowed in Python ? Exemplify your answer.

Q 9. What are operators ? What is their function ? Give examples of unary and binary operators.

Q 10. What are variables ? How are they important for a program ?