Python

1. A int
2. C string
3. D none
4. C set
5. D 27
6. C modules
7. B 2
8. A by indentation
9. C it is aobservation for else if and is used in multiple conditions.
10. A The numbers 0 to 5 (inclusive)
11. A 10
12. D list
13. C type(var)
14. B false
15. A logical
16. A +
17. A Membership test for lists and strings
18. D it is executed when the condition is false
19. B it is a place holder and does nothing
20. C 2
21. A logical or
22. A **
23. C It is a short form of "else if" and is used for multiple conditions
24. C odd

Task 1 : arithmetic operators
syntax

```
x= 50
y= 10
add= x+y
sub= x-y
mult=x*y
div = x/y

print(f"sum of the 2 numbers is {add}")
print(f"difference of the 2 numbers is {sub}")
print(f"the product of the 2 numbers is {mult}")
print(f"the division of the 2 numbers is {div}")
```

Output
sum of the 2 numbers is 60
difference of the 2 numbers is 40
the product of the 2 numbers is 500
the division of the 2 numbers is 5.0

Task 2

Syntax

```
# logical operators
age = int(input("what is your age ? :"))
if age<18:
   print(f"you are minor")
elif age>18:
   print(f"you are major")
```

Input is 2
what is your age ? :2
you are minor

Input is 21
what is your age ? : 21
you are major

Task 3

Syntax

```
# comparision operators

str1=input("enter the first string :")
str2=input("enter the second string :")
if str1==str2:
   print (f"string are equal")
else:
   print(f"strings are not equal")
```

Out put
enter the first string :nishanth
enter the second string :nishanth
string are equal

enter the first string : apple
enter the second string :samsung
strings are not equal

Task 4

Syntax

```
# while loop
x=1
while x<=5:
```

```
   print(x)
   x+=1
```

Output

1
2
3
4
5

Task 5

Syntax

```
# for loop for the fruits
fruits = ["apple","mango","banana","fig","orange","cherry"]
for fruits in fruits:
   print (fruits)
```

Output

apple
mango
banana
fig
orange
cherry

Task 6

```
# lists
num=[10,20,30,40,50,60,70,80,90]
num.append(100)
print(f"the list after adding a number{num}")
```

Output

the list after adding a number[10, 20, 30, 40, 50, 60, 70, 80, 90, 100]

```
num=[10,20,30,40,50,60,70,80,90]
num.remove(30)
print(f"the list after removing  a number{num}")
```

Output

the list after removing a number[10, 20, 40, 50, 60, 70, 80, 90]

Task 7

```
# creating a dictonary
dictnonay={"name":"nishanth","age":"21","city":"hyderabad"}
print(f"the information of the persson is :{dictnonay}")
dictnonay["occupation"]="software developer"
print (f"the updated inforamtion of person is {dictnonay}")
```

Out put
the information of the persson is :{'name': 'nishanth', 'age': '21', 'city': 'hyderabad'}
the updated inforamtion of person is {'name': 'nishanth', 'age': '21', 'city': 'hyderabad', 'occupation': 'software developer'}

Task 8

```
num1=float(input("enter the first number :"))
num2=float(input("enter the second number :"))

result=num1+num2

if result > 10 :
   print(f"the sum is grater than 10")
elif result<=10:
   print(f"the sum is less tan or equal to 10")
```

enter the first number :10
enter the second number :20
the sum is grater than 10

enter the first number :5
enter the second number :2
the sum is less than or equal to 10

Process finished with exit code 0