TASK-4

PYTHON CODING QUESTIONS IN INTERVIEWS

1. Write a program to print the given number is odd or even.

```
num = int(input("Enter a number: "))
if (num % 2) == 0:
print("{0} is Even".format(num))
else:
print("{0} is Odd".format
```

2. Write a program to find the given number is positive or negative.

```
num = float(input("Enter a number: "))
# Input: 1.2
if num > 0:
print("Positive number")
elif num == 0:
print("Zero")
else:
print("Negative number") #OUTPUT: Positive number
```

3. Write a program to find the sum of two numbers.

```
num1 = int(input("Enter Number1: "))
# Input1 : 21
num2 = int(input("Enter Number2: "))
# Input2 : 11
print("sum of given numbers is:", num1 + num2) #output2: 32
```

4. Write a program to find if the given number is prime or not.

```
num = int(input("enter a number: "))
# input: 23
flag = False
if num > 1:
```

```
for i in range(2, num):
if (num % i) == 0:
flag = True
break
if flag:
print(num, "is not a prime number")
else:
print(num, "is a prime number")
#23 is a prime number
```

5. Write a program to check if the given number is palindrome or not.

```
#num = int(input("Enter a number: "))

# Input: 12321
temp = num
reverse = 0
while temp > 0:
remainder = temp % 10
reverse = (reverse * 10) + remainder
temp = temp // 10
if num == reverse:
print('Palindrome')
else:
print("Not Palindrome")
# Output: Palindrome
```

6. Write a program to check if the given number is Armstrong or not.

```
num = int(input("Enter a number: "))
# Input: 407
sum = 0
temp = num
while temp > 0:
digit = temp % 10
sum += digit ** 3
temp //= 10
if num == sum:
print(num,"is an Armstrong number")
else:
print(num,"is not an Armstrong number")
# Output: 407 is an Armstrong number
```

7. Write a program to check if the given strings are anagram or not.

```
def check(s1, s2):
if(sorted(s1)== sorted(s2)):
print("The strings are anagrams.")
else:
print("The strings aren't anagrams.")
s1 = input("Enter string1: ")
# input1: "listen"
s2 = input("Enter string2: ")
# input2: "silent"
check(s1, s2)
# output: anagram is a string
```

8. Write a program to find a maximum of two numbers.

```
def maximum(a, b):
if a >= b:
return a
else:
return b
a = int(input("Enter a number: "))
# input1: 2
b = int(input("Enter a number: "))
# input2: 4
print(maximum(a, b))
#output: 4
```

9.Write a program to find a minimum of two numbers.

```
def minimum(a, b):
if a <= b:
return a
else:
return b
a = int(input("Enter a number: "))
# input1: 2
b = int(input("Enter a number: "))
# input2: 4
print(minimum(a, b))
#output:2
```

10.Write a program to find a maximum of three numbers.

```
def maximum(a, b, c):
if (a >= b) and (a >= c):
largest = a
elif (b >= a) and (b >= c):
largest = b
else:
largest = c
return largest
a = int(input("Enter a number: "))
# Input1: 10
b = int(input("Enter a number: "))
# Input2: 14
c = int(input("Enter a number: "))
# Input3: 12
print(maximum(a, b, c))
#output: 14
```

11. Write a program to find a minimum of three numbers.

```
a = int(input('Enter first number : '))
# 12
b = int(input('Enter second number : '))
# 14
c = int(input('Enter third number : '))
# 11
smallest = 0
if a < b and a < c :
smallest = a
if b < a and b < c :
smallest = b
if c < a and c < b :
smallest = c
print(smallest, "is the smallest of three numbers.")
#11 is the smallest of three number
```

12. Write a program to find a factorial of a number.

```
num = int(input("Enter a number: "))
# 7
factorial = 1
```

```
if num < 0:
print("Sorry, factorial does not exist for negative numbers")
elif num == 0:
print("The factorial of 0 is 1")
else:
for i in range(1,num + 1):
factorial = factorial*i
print("The factorial of",num,"is",factorial)
# 5040
```

13. Write a program to find a fibonacci of a number.

```
nterms = int(input("How many terms? "))
# 7
n1, n2 = 0, 1
count = 0
if nterms <= 0:
print("Please enter a positive integer")
elif nterms == 1:
print("Fibonacci sequence upto",nterms,":")
print(n1)
else:
print("Fibonacci sequence:")
while count < nterms:
print(n1)
nth = n1 + n2
n1 = n2
n2 = nth
count += 1
# Fibonacci sequence:
# 0
# 1
# 1
# 2
# 3
# 5
#8
```

14. Write a program to find GCD of two numbers.

```
def gcd(a, b):
if (a == 0):
return b
```

```
if (b == 0):
return a
if (a == b):
return a
if (a > b):
return gcd(a-b, b)
return gcd(a, b-a)
a = 98
b = 56
if(gcd(a, b)):
print('GCD of', a, 'and', b, 'is', gcd(a, b))
else:
print('not found')
```

15. Write a program to print the following pattern.

```
def myfunc(n):
for i in range(0, n):
for j in range(0, i+1):
print("* ",end="")
print("\r")
n = 5
myfunc(n)
```

16. Write a program to print the following pattern.

```
def myfunc(n):
k = n - 1
for i in range(0, n):
```

```
for j in range(0, k):
print(end=" ")
k = k - 1
for j in range(0, i+1):
print("* ", end="")
print("\r")
n = 5
myfunc(n)
```

17. Write a program to print the following pattern.

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

```
def num(n):
num = 1
for i in range(0, n):
num = 1
for j in range(0, i+1):
print(num, end=" ")
num = num + 1
print("\r")
n = 5
num(n)
```

18. Write a program to print the following pattern.

```
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
```

```
def num(n):
num = 1
for i in range(0, n):
for j in range(0, i+1):
```

```
print(num, end=" ")
num = num + 1
print("\r")
n = 5
num(n)
```

19. Write a program to print the following pattern.


```
def alphapat(n):
num = 65
for i in range(0, n):
for j in range(0, i+1):
ch = chr(num)
print(ch, end=" ")
num = num + 1
print("\r")
n = 5
alphapat(n)
```

20.Write a program to print the following pattern.


```
def contalpha(n):
num = 65
for i in range(0, n):
for j in range(0, i+1):
ch = chr(num)
print(ch, end=" ")
num = num + 1
```

```
print()
n = 5
contalpha(n)
```