

TASK-2

Q1: Python program to print all the even number within a given range

PROGRAM

```
1 # Q1: Python program to print all the even number within a given range
2 #1 to 50 even numbers
3 i=1
4 for i in range(1,51):
5     if i%2==0:
6         print(i)
7     i+=1
```

OUTPUT

```
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
```

Q2: Python program to calculate the sum of the odd numbers within the given range

PROGRAM

```
1 # Q2: Python program to calculate the sum of the odd numbers within the given range
2 i=10
3 sum=0
4 while(i<=50):
5     if(i%2!=0):
6         sum=sum+i
7     i=i+1
8 print("sum of all even numbers from 10 to 50 =",sum)
9
```

OUTPUT

```

PYTHON FULLSTACK/PYTHON CORE & ADVANCED/TASK 2/Q2.1
sum of all even numbers from 10 to 50 = 600
PS C:\Users\HP\Desktop\PYTHON FULLSTACK>

```

Q3: Python program to check if the given string is a palindrome or not
->Palindrome-a word that reads the same backward as forward

Madam=madaM

PROGRAM

```

1  # Q3: Python program to check if the given string is a palindrome or not
2  # ->Palindrome-a word that reads the same backward as forward
3  # Madam=madaM
4  word="madam"
5  result=""
6  length=len(word)-1
7  for i in range(length,-1,-1):
8      result=result+word[i]
9      # print(word[i])
10 print(result)
11 print("paliandrome" if result==word else "not paliandrome")
12

```

OUTPUT

```

PYTHON FULLSTACK/PYTHON CORE & ADVANCED/TASK 2/Q3.1
madam
paliandrome
PS C:\Users\HP\Desktop\PYTHON FULLSTACK>

```

Q4: Python program to check if a given number is an Armstrong number

->An Armstrong number is a number that equals to the sum of its individual,

digits each raised to the power of the number of digits
eg:-153

number of digits = 3
 $1^3 + 5^3 + 3^3 = 1 + 125 + 27 = 153$

PROGRAM

```

1  # Q4: Python program to check if a given number is an Armstrong number
2  # ->An Armstrong number is a number that equals to the sum of its individual,digits
3  # eg:- 153
4  # number of digits = 3
5  # 1^3+5^3+3^3=1+125+27=153
6  num=input("enter number=")
7  digit_count=len(num)
8  num=int(num)
9  original=num
10 sum=0
11 while(num!=0):
12     digit=num%10
13     exp=digit**digit_count
14     sum=sum+exp
15     num=num//10
16 print(sum)
17 if(original==sum):
18     print("number is armstrong")
19 else:
20     print("number is not armstrong")
21
22

```

OUTPUT

```

enter number=153
153
number is armstrong
PS C:\Users\HP\Desktop\PYTHON FULLSTACK> & C:/Users/HP/AppData/Local/Programs/Python/Python39-6/Python.exe C:/Users/HP/AppData/Local/Programs/Python/Python39-6/Python.exe C:/Users/HP/Desktop/PYTHON FULLSTACK/TASK 2/PYTHON FULLSTACK/PYTHON CORE & ADVANCED/LOOPING/WHILE LOOP/
enter number=567
684
number is not armstrong
PS C:\Users\HP\Desktop\PYTHON FULLSTACK>

```

Q5: Python program to get the Fibonacci series between 0 to 50

PROGRAM

```

1 # Q5: Python program to get the Fibonacci series between 0 to 50
2 prev=0
3 current=1
4 limit=50
5 next=1
6 print(prev)
7 print(current)
8 while(next<=limit):
9     print(next)
10    prev=current
11    current=next
12    next=current+prev
13

```

OUTPUT

```

PS C:\Users\HP\Desktop\PYTHON FULLSTACK> & C:/Users/HP/AppData/Local/Programs/Python/Python39-6/Python.exe C:/Users/HP/Desktop/PYTHON FULLSTACK/TASK 2/PYTHON FULLSTACK/PYTHON CORE & ADVANCED/TASK 2/PYTHON FULLSTACK/PYTHON CORE & ADVANCED/LOOPING/WHILE LOOP/
0
1
1
2
3
5
8
13
21
34

```

Q6: Python program to check given number is prime or not

PROGRAM

```

1 # Q6: Python program to check given number is prime or not
2 num=int(input("enter number="))
3 is_prime=True
4 if num==1:
5     is_prime=False
6 # elif num==2:
7 #     is_prime=True
8 else:
9     for i in range(2,num):
10        if(num%i==0):
11            is_prime=False
12            break
13 print(is_prime)

```

OUTPUT

```

enter number=5
True
PS C:\Users\HP\Desktop\PYTHON FULLSTACK>

```