

Alfred Jophy

CS27

Python

1.

Source Code

```
#!/bin/python
#
# Write a program to find the largest among three numbers
#
print("Alfred Jophy CS27          11/03/2021")

a=int(input("Enter first number : "))
b=int(input("Enter second number : "))
c=int(input("Enter third number : "))

if a >= b and a >= c :
    largest = a
elif b >= a and b >= c :
    largest = b
else :
    largest = c

print("Largest number is",largest)
```

Output



```
Sem_3/Python/2 on master [?] via v3.9.6
$ ./1.py
Alfred Jophy CS27          11/03/2021
Enter first number : 4
Enter second number : 7
Enter third number : 1
Largest number is 7
Sem_3/Python/2 on master [?] via v3.9.6 took 6s
```

2.

Source Code

```
#!/bin/python
#
# Write a program to find the roots of a quadratic equation
#
print("Alfred Jophy CS27          11/03/2021")

import math

print("Form of a quadratic equation : ax^2 + bx + c")

a=int(input("Enter the coefficient for x^2 : "))
b=int(input("Enter the coefficient for x : "))
c=int(input("Enter c : "))
```

```

print("\nThe Equation : "+str(a)+"x^2 + "+str(b)+"x+",c)

d= b**2 - 4*a*c
if d < 0 :
    print("No real roots")
elif d ==0 :
    root=-b/(2*a)
    print("Equal roots :",root)
else:
    root1=-b+math.sqrt(d)
    root2=-b-math.sqrt(d)
    root1/=2*a
    root2/=2*a
    print("Roots of the equation :",root1,root2)

```

Output

```

Sem_3/Python/2 on master [!?!] via v3.9.6 took 22s
> ./2.py 10:37:43
Alfred Jophy CS27 11/03/2021
Form of a quadratic equation : ax^2 + bx + c
Enter the coefficient for x^2 : 5
Enter the coefficient for x : 6
Enter c : 1

The Equation : 5x^2 + 6x+ 1
Roots of the equation : -0.2 -1.0
Sem_3/Python/2 on master [!?!] via v3.9.6 took 9s
1. > 10:37:56
Sem_3/Python/2 on master [!?!] via v3.9.6 took 9s
> ./2.py 10:37:58
Alfred Jophy CS27 11/03/2021
Form of a quadratic equation : ax^2 + bx + c
Enter the coefficient for x^2 : 1
Enter the coefficient for x : 0
Enter c : 0

The Equation : 1x^2 + 0x+ 0
Equal roots : 0.0
Sem_3/Python/2 on master [!?!] via v3.9.6 took 7s
2. > 10:38:09
Sem_3/Python/2 on master [!?!] via v3.9.6 took 7s
> ./2.py 10:38:10
Alfred Jophy CS27 11/03/2021
Form of a quadratic equation : ax^2 + bx + c
Enter the coefficient for x^2 : 5
Enter the coefficient for x : 2
Enter c : 1

The Equation : 5x^2 + 2x+ 1
No real roots
Sem_3/Python/2 on master [!?!] via v3.9.6 took 4s
3. > 10:38:15

```

3.

Source Code

```
#!/bin/python
#
# Write a program to check if a given string is a palindrome
#
print("Alfred Jophy CS27          11/03/2021")

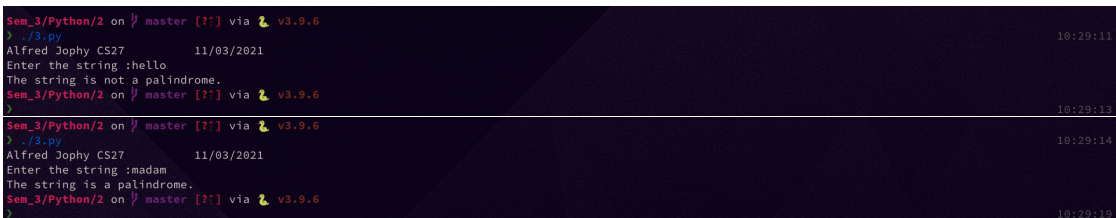
string=input("Enter the string :")

strlen=len(string)

f=True

for i in range(0,strlen//2) :
    if string[i] != string[strlen-i-1] :
        f=False
        break
if f :
    print("The string is a palindrome.")
else:
    print("The string is not a palindrome.")
```

Output



```
Sem_3/Python/2 on master [?] via v3.9.6
$ ./3.py
Alfred Jophy CS27          11/03/2021
Enter the string :hello
The string is not a palindrome.
Sem_3/Python/2 on master [?] via v3.9.6
$ ./3.py
Alfred Jophy CS27          11/03/2021
Enter the string :madam
The string is a palindrome.
Sem_3/Python/2 on master [?] via v3.9.6
$
```

4.

Source Code

```
#!/bin/python
#
# Write a program to check if a given number is a prime
#
print("Alfred Jophy CS27          11/03/2021")

import math

num=int(input("Enter the number : "))

f=True
for i in range(2,math.isqrt(num)):
    if num % i ==0 :
```

```

        f=False
        break

if f :
    print("The number is a prime.")
else :
    print("The number is not a prime.")

```

Output

```

Sem_3/Python/2 on ♀ master [?]: via 🐍 v3.9.6
> ./4.py
Alfred Jophy CS27 11/03/2021
Enter the number : 37
The number is a prime.
Sem_3/Python/2 on ♀ master [?]: via 🐍 v3.9.6 took 5s
1. >
Sem_3/Python/2 on ♀ master [?]: via 🐍 v3.9.6
> ./4.py
Alfred Jophy CS27 11/03/2021
Enter the number : 39
The number is not a prime.
Sem_3/Python/2 on ♀ master [?]: via 🐍 v3.9.6 took 3s
2. >

```

5.

Source Code

```

#!/bin/python
#
# Write a program to print fibonacci series
#
print("Alfred Jophy CS27          11/03/2021")

length=int(input("Enter the lenght of the sequence :"))

tn_2=0
tn_1=1

print(tn_2)
print(tn_1)

for i in range(2,length):
    tn=tn_1+tn_2
    tn_2=tn_1
    tn_1=tn
    print(tn)

```

Output

```

Sem_3/Python/2 on ♀ master [?]: via 🐍 v3.9.6 took 2s
> ./5.py
Alfred Jophy CS27 11/03/2021
Enter the lenght of the sequence :10
0
1
1
2
3
5
8
13
21
34
1. >

```