

1.

```
time = int(input("Enter the time in seconds: "))
min = time // 60
remainingSec = time % 60
print(time,"is", min,"minutes and",remainingSec,"seconds")
```

```
Enter the time in seconds: 200
200 is 3 minutes and 20 seconds
```

2. (a)

```
import math
num = int(input("Enter the number: "))
result = math.factorial(num)
print("The factorial of the num is: ", result)
```

```
➞ Enter the number: 6
The factorial of the num is: 720
```

2.

```
import math
num = int(input("Enter the angle : "))
result = math.sin(math.radians(num))
print("The sine of the entered angle is: ",result)
```

```
Enter the angle : 90
The sine of the entered angle is: 1.0
```

3.

```
temp = float(input("Enter temperature: "))
unit = int(input("Press 0 for Celcius and press 1 for Fahrenheit: "))
if unit == 0 :
    converted_to_F = (9/5)*temp+32
    print(temp,"Celsius is equal to", converted_to_F, "Fahrenheit")
elif unit == 1 :
    converted_to_C = (5/9)*(temp-32)
    print(temp,"Fahrenheit is equal to", converted_to_C, "Celcius")

else :
    print("Invalid input.")
```

```
Enter temperature: 56
Press 0 for Celcius and press 1 for Fahrenheit: 1
56.0 Fahrenheir is equal to 13.333333333333334 Celcius
```

4.

```
credit = int(input("How many credits have you taken? "))
if(credit<=23):
    print("You are freshman")

elif(credit>=24 and credit<=53):
    print("You are sophomore")

elif(credit>=54 and credit<=83):
    print("You are junior")

elif(credit>=84):
    print("You are senior")
```

```
How many credits have you taken? 34
You are a sophomore
```

#5.

```
year = int(input("Enter the year: "))
if(year%400 == 0):
    print(year,"is a leaf year")

elif(year%4 == 0):
    print(year,"is a leaf year")

elif(year%100==0):
    print(year,"is not a leaf year")

else:
    print(year,"is not a leaf year")
```

```
Enter the year: 2025
2025 is not a leaf year
```