1.

```
inp = input("Press c if you want to give input in celsius or else press f\n")
itemp = int(input("Enter the Temperature\n"))
if (inp == 'c'):
    ftemp = (itemp * (9/5)) + 32
    itemp = str(itemp)
    ftemp = str(ftemp)
    print(itemp + " degree C is " + ftemp + " in Fahrenheit")
else:
    ftemp = (itemp - 32) * (5/9)
    itemp = str(itemp)
    ftemp = str(ftemp)
    print(itemp + "F is " + ftemp + " in Celsius")
```

2.

```
day = int(input("Input birthday: "))
month = input("Input month of birth(e.g. march,july,etc): ")

if month == 'december':
    sign = 'Sagittarius' if (day<22) else 'Capricorn'
    print("Your Astrological sign is: "+sign)

elif month == 'january':
    sign = 'Capricorn' if (day<20) else 'Aquarius'
    print("Your Astrological sign is: "+sign)

elif month == 'february':
    sign = 'Aquarius' if (day<20) else 'Pisces'
    print("Your Astrological sign is: "+sign)

elif month == 'march':
    sign = 'Pisces' if (day<21) else 'Aries'
    print("Your Astrological sign is: "+sign)

elif month == 'april':
    sign = 'Aries' if (day<21) else 'Taurus'
    print("Your Astrological sign is: "+sign)

elif month == 'may':
    sign = 'Taurus' if (day<22) else 'Gemini'
    print("Your Astrological sign is: "+sign)

elif month == 'june':
    sign = 'Gemini' if (day<22) else 'Cancer'
    print("Your Astrological sign is: "+sign)

elif month == 'july':
    sign = 'Cancer' if (day<23) else 'Leo'
    print("Your Astrological sign is: "+sign)

elif month == 'august':
    sign = 'Leo' if (day<24) else 'Virgo'
```

```
    print("Your Astrological sign is: "+sign)

elif month == 'september':
    sign = 'Virgo' if (day<24) else 'Libra'
    print("Your Astrological sign is: "+sign)

elif month == 'october':
    sign = 'Libra' if (day<24) else 'Scorpio'
    print("Your Astrological sign is: "+sign)

elif month == 'november':
    sign = 'Scorpio' if (day<23) else 'Sagittarius'
    print("Your Astrological sign is: "+sign)

else:
    print("Invalid Month Entered")
```

3.

```
n = int(input("Enter a Number\n"))
if n<=17:
    print(17-n)
else:
    print(n-17)*2
```

4.

```
st = input("Enter a String\n")
if len(st) >= 2 and st[:2] == "Is":
    print(st)
else:
    print("Is" + st)
```

5.

```
x = int(input("Enter the value of x\n"))
y = int(input("Enter the value of y\n"))

res = (x*x) + (y*y) + (2*x*y)
print(res)
```

6.

```
p = float(input("Enter Principal Amount\n"))
r = int(input("Enter Rate of Interest\n"))
t = int(input("Enter Time in Years\n"))

ci = p*((1+(r/100))**t)

a = p + ci
a = str(a)
print("The future amount is = "+a)
```

7.

```
import math
```

```
x1 = int(input("Enter the x coordinate of 1st point"))
y1 = int(input("Enter the y coordinate of 1st point"))
x2 = int(input("Enter the x coordinate of 2nd point"))
y2 = int(input("Enter the y coordinate of 2nd point"))

dist = math.sqrt((x1-x2)**2 + (y1-y2)**2)
print("The distance between the given points is: ",dist)
```

8.

```
x = int(input("Enter the 1st no."))
y = int(input("Enter the 2nd no."))
z = int(input("Enter the 3rd no."))
a1 = max(x,y,z)
a2 = min(x,y,z)
a3 = (x+y+z)-(a1+a2)
a1 = str(a1)
a2 = str(a2)
a3 = str(a3)
print(a1+">"+a3+">"+a2)
```

9.

```
import sys
print("Float value Information: ",sys.float_info)
print("\nInteger value Information: ",sys.float_info)
print("\nMaximum size of an Integer: ",sys.maxsize)
```

10.

```
x = 'true'
x = int(x == 'true')
print(x)
x = 'abcd'
x = int(x== 'true')
print(x)
```