# Chapter 3

3.7

print ("Python Programming Language")

print (5000)

print( 29776\*34)

print ("pi=3.14")

3.14

print ("Enter the name of your city:")

city\_name=input()

print ("The name of your city is: "+city\_name)

3.15

print ("Enter two numbers:")

x=input()

y=input()

print("Addition will take values as string and join the two:", x+y)

print ("Enter same two numbers again:")

x=int(input())

y=int(input())

print("Addition will take values as integers and add the two:", x+y)

3.18

print ("Enter two numbers, first bigger than the second:")

num1=int(input())

num2=int(input())

print("Addition:",num1+num2)

print("Subtraction:",num1-num2)

print("Division:",num1/num2)

print("Multiplication:",num1\*num2)

print("Modulo:",num1%num2)

print("Floor division:",num1//num2)

print("Exponent (first number raised to power of 2 here:",num1\*\*2)

3.20

x = 25

y = 20

print(x == y)

print(x != y)

print(x > y)

print(x < y)

print(x >= y)

print(x <= y)

3.22

x = 5

print(x > 4 and x < 10)

print(x > 2 or x < 4)

print(not(x > 4 and x < 10))

Fi

3.24

x = 10

x += 10

print(x)

x -= 10

print(x)

x \*= 10

print(x)

x /= 10

print(x)

x %= 10

print(x)

x //= 10

print(x)

x \*\*= 10

print(x)

x &= 10

print(x)

x |= 10

print(x)

x ^= 10

print(x)

x >>= 10

print(x)

x <<= 10

print(x)

3.25

List1=[10,20,30,40,50]

List2=[45.7, 78.2, 99.0, 108.6]

List3=["Tamanna", "Sakshi", "Kokila", "Sneha"]

List4=[68, 4.5, "Python", 8]

print(List1)

print(List2)

print(List3)

print(List4)

3.26

List1=[10,20,30,40,50]

print("Complete list:", List1)

print("First element", List1[0])

print("Third element:", List1[2])

print("Second element upto fifth element:", List1[1:4])

3.27

List4=[68, 4.5, "Python", 8]

print("Complete list:", List4)

print("Second element onwards:", List4[1:])

print("Till the third element", List4[:2])

3.28

List4=[68, 4.5, "Python", 8]

print(List4[-1])

print(List4[-3])

3.29

List\_num=[11, 22, 33, 44, 55, 66, 77]

print(List\_num)

List\_num.insert(4, 88)

print(List\_num)

3.30

List\_num=[11, 22, 33, 44, 55, 66, 77]

print(List\_num)

List\_num.pop(3)

print(List\_num)

3.32

List\_fun=[8, 'planets', 'Mercury', 'Venus', 'Mars', 'Jupiter', 'Jupiter', 'Saturn', 'Uranus']

print(List\_fun)

print("Length of list=", len(List\_fun))

List\_fun.insert(4, 'Earth')

print("List after inserting 'Earth'")

print(List\_fun)

List\_fun.pop(6)

print("List after deleting 'Jupiter'")

print(List\_fun)

List\_fun.append('Neptune')

print("List after appending 'Neptune'")

print(List\_fun)

List\_fun1= List\_fun.copy()

print("List copied into another list")

print(List\_fun1)

List\_fun1.extend(List\_fun[0:1])

print("Second list after extending by first element of first list")

print(List\_fun1)

List\_fun1.clear()

print("A cleared list")

print(List\_fun1)

3.33

num=int(input ('Enter a number :'))

if num%2==0:

print('The number entered is even')

3.34

num=int(input ('Enter a number :'))

if num==0:

print('The number entered is zero')

elif num%2==0:

print('The number entered is even')

3.35

num=int(input ('Enter a number :'))

if num==0:

print('The number entered is zero')

elif num%2==0:

print('The number entered is even')

else num%2!=0:

print('The number entered is odd')

3.36

x= float(input("Enter any positive number between 1 to 500:"))

if x<500:

print("Value is less than 500")

if x<500 and x>=400:

print("Value is between 400-499")

elif x<400 and x>=300:

print("Value is between 300-399")

elif x<300 and x>=200:

print("Value is between 200-299")

elif x<200 and x>=100:

print("Value is between 100-199")

elif x<100 and x>=1:

print("Value is between 1-99")

else:

print("Value is more than 500")

3.37

num = 8

while num <= 80:

print(num)

num+=8

3.38

num=5

while num < 300:

print(num)

if (num == 155):

break

num += 50

print("break statement encountered!")

3.39

mangoes = ["banganapalli", "totapuri", "alphonso"]

for x in mangoes:

print(x)

3.40

x=1

for x in range(1, 16):

print(x)

x=x+1

3.41

x=1

for x in range(1, 16, 3):

print(x)

x=x+1

3.42

mangoes = ["banganapalli", "totapuri", "alphonso"]

for x in mangoes:

if x == "totapuri":

continue

print(x)

3.43

mangoes = ["banganapalli", "totapuri", "alphonso"]

for x in mangoes:

pass

print(x)

3.44

colour = ["Red", "Green", "Blue"]

item = ["pen", "pencil", "paper"]

for x in colour:

for y in item:

print(x, y)

3.45

i = 1

j = 11

while i< 6:

while j < 16:

print(i, ",", j)

j = j + 1

i = i + 1