Functions

1. Ackley function, 3 variables
Minima : f(x) = 0, x =(0,0,0)
Obtained :f(x) = 12.172751856335983, x=(20, 2 ,-16)
Details: Population size = 150
Search Region: (-64,64), (-64,64), (-64,64), Integers
No of iterations:10000
Mutation Rate: 2%

2.Ackley function, 2 variables
Minima:f(x) = 0, x=(0,0)
Obtained:f(x) = 6.91503648286, x=(0,3)
Details: Population size = 150
Search Region: (-32,32), (-32,32), Integers
No of iterations:1000
Mutation Rate: 2%

3.Ackley function, 1 variable
Minima:f(x) = 0, x=(0)
Obtained:f(x) = 4.69494620141, x=(-1)
Details: Population size = 150
Search Region: (-32,32), Integers
No of iterations:1000
Mutation Rate: 2%

4.Bukin Function N. 6, 2 variable
Minima:f(x) = 0, x=(-10,1)
Obtained:f(x) = 0, x=(-10,1)
Details: Population size = 50
Search Region: (-15,-5),(-3,3), Integers
No of iterations:1000
Mutation Rate: 2%

5. Cross in tray function, 2 variable(This function has multiple global minima)
Minima:f(x) = -2.06261, x=(1.3491,-1.3491)
Obtained:f(x) = -2.03433051263634, x=(1,1)
Details: Population size = 150
Search Region: (-16,16),(-16,16), Integers
No of iterations:1000
Mutation Rate: 2%

6.Drop wave function
Minima:f(x) = -1, x=(0,0)
Obtained:f(x) = --0.7375415834929969 x=(1,0)
Details: Population size = 150
Search Region: (-8,8),(-8,8), Integers
No of iterations:10000
Mutation Rate: 2%