**LAB # 13**

**IMPLEMENTING METAHEURISTIC ALGORITHM**

**(Genetic Algorithm)**

**Lab Tasks:**

1. Run the given code of Genetic Algorithm (Coin Toss Problem) and show the output.

**Source Code:**

A screenshot of a computer program

Description automatically generated

A computer screen shot of a program

Description automatically generated

**Output:**

A white background with many small letters

Description automatically generated with medium confidence

1. In given code there are crossover functions implemented between S1, S4 and S5, S6 after 3rd point. You can perform crossover between S2 and S3 after 4th point.

**Source Code:**

A screenshot of a computer program

Description automatically generated

A screenshot of a computer program

Description automatically generated

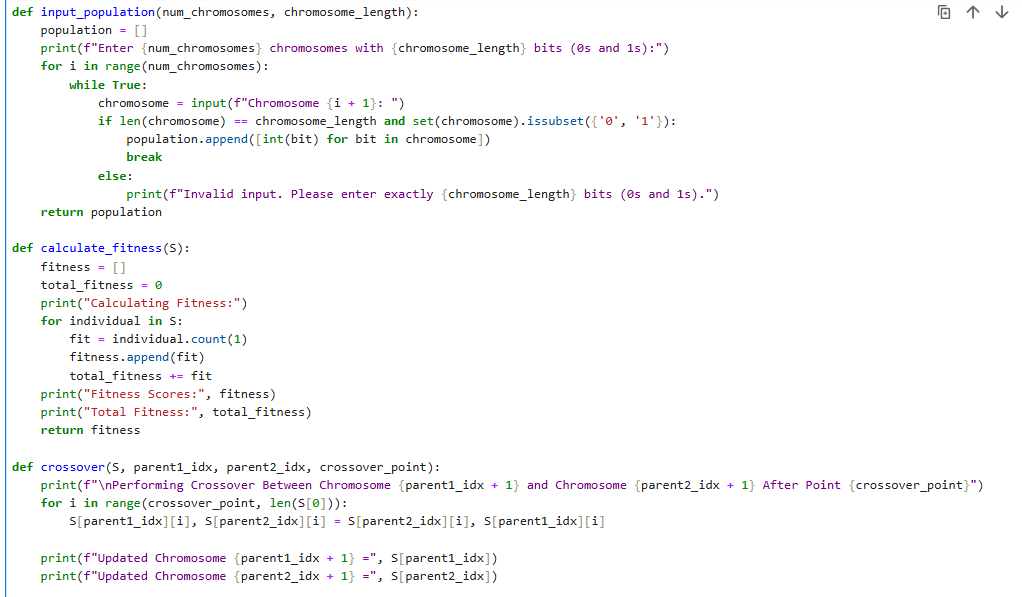
**Output:**

A white background with many small black and white lines

Description automatically generated with medium confidence

1. In given code the values of chromosomes are hardcoded, you may take input values of chromosomes at run time.

**Source Code:**



A computer screen shot of a computer code

Description automatically generated

A screenshot of a computer program

Description automatically generated

**Output:**

A screenshot of a computer

Description automatically generated

**Uploading Task on GitHub:**

A screenshot of a web page

Description automatically generated

A screenshot of a computer

Description automatically generated