## 5 Lab 5 - March 17, 2022

5.1 Using the Euclid's Algorithm find the greatest common divisor of 346 and 36 .
5.2 Find all the solutions of the following Diophantic equation

$$
319 x+473 y=0
$$

5.3 Find all the pairs of integers $x$ and $y$ for which

$$
6 x+9 y=204
$$

5.4 Find all the pairs of integers $x$ and $y$ for which

$$
10 x-15 y=131
$$

5.5 Find all the pairs of integers $x$ and $y$ for which

$$
167 x+32 y=1
$$

5.6 Find all the solutions of the following Diophantic equation

$$
712 x+36 y=2
$$

5.7 Find all the pairs of integers $x$ and $y$ for which

$$
654 x+234 y=12
$$

5.8 Find all the pairs of integers $x$ and $y$ for which

$$
512 x+355 y=6
$$

5.9 Find all the pairs of integers $x$ and $y$ for which

$$
819 x+315 y=126
$$

