# Sprawozdanie

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#### 1 Parki

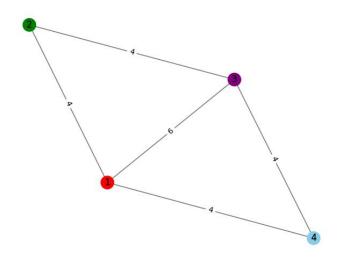


Figure 1: Park numer 1

Projekt zawiera rozszerzenia R0 i R1. Czyli moze sie znalezc pare wyjsc oraz pare osk. Pisany w javie, pythonie i bashu. Korzystamy ze struktury danych DS1. Wszystkie macierze sa zapamietywane jako mapa map i intow z wartosciami nierowynymi 0.

### 2 Hipoteza 1

H1: Algorytm A2 zwykle daje dokladniejsze wyniki niz A1. Roznica dokladności rosnie wraz z rozmiarem macierzy i liczba niezerowych wspolczynnikow. Hipoteza nieprawdziwa. Dla kazdego przykladu wyniki otrzymywane były takie same.

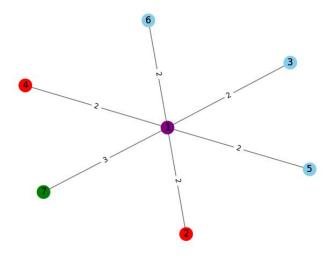


Figure 2: Park numer 2

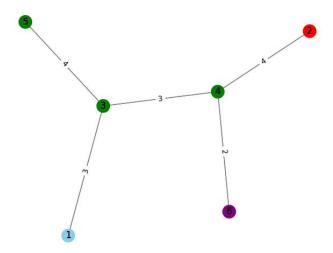


Figure 3: Park numer 3

## 3 Hipoteza 2

H2: Algorytm A3 działa dla postawionego zadania ????

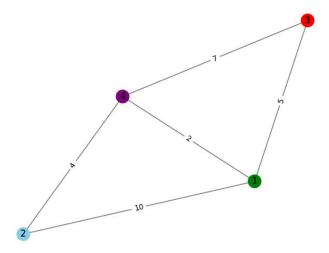


Figure 4: Park numer 4

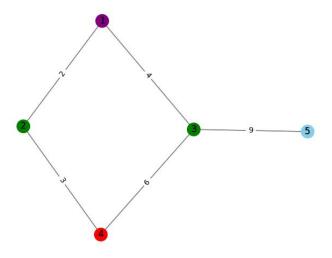


Figure 5: Park numer 5

## 4 Hipoteza 3

H3: Jesli algorytm A3 jest zbiezny do rozwiazania, to wyniki otrzymujemy istotnie szybciej niz dla A1 i A2 Hipoteza (nie)prawdziwa

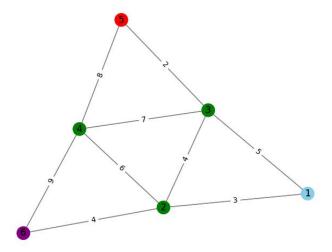


Figure 6: Park numer 6

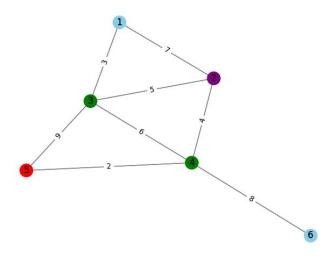


Figure 7: Park numer 7

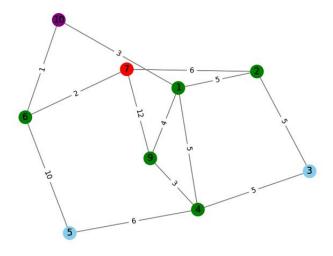


Figure 8: Park numer 8

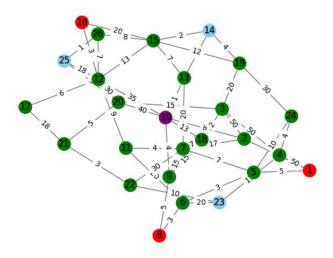


Figure 9: Park numer 9

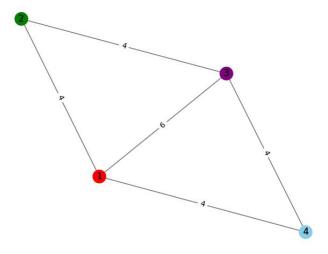


Figure 10: Park numer 1

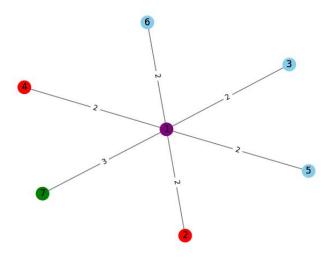


Figure 11: Park numer 2

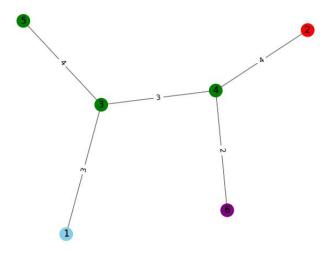


Figure 12: Park numer 3

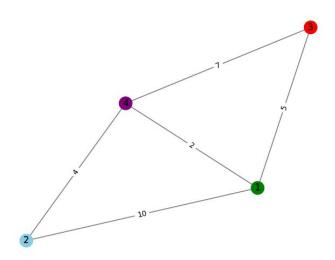


Figure 13: Park numer 4

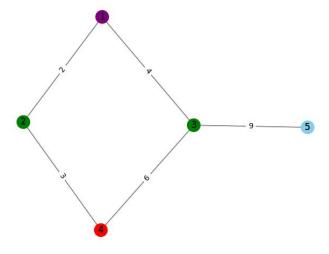


Figure 14: Park numer 5

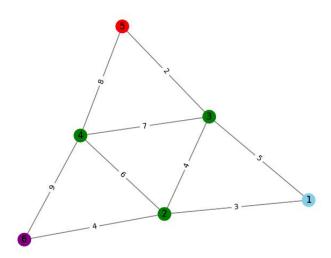


Figure 15: Park numer 6

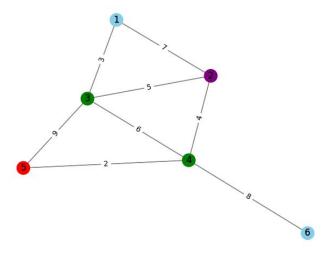


Figure 16: Park numer 7

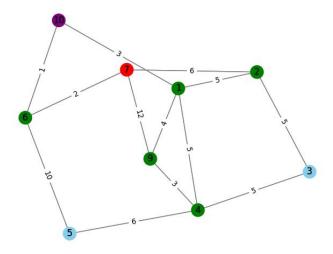


Figure 17: Park numer 8

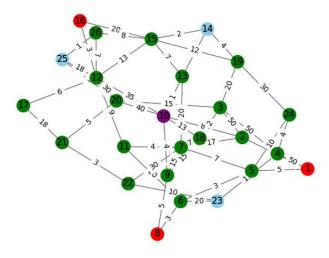


Figure 18: Park numer 9

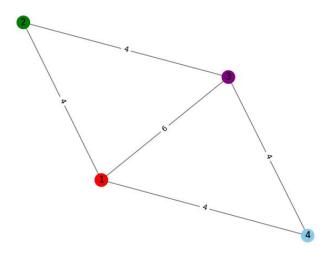


Figure 19: Park numer 1

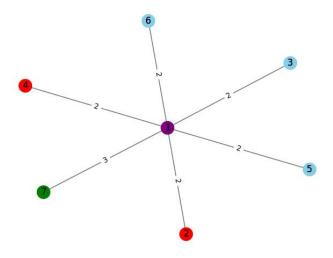


Figure 20: Park numer 2

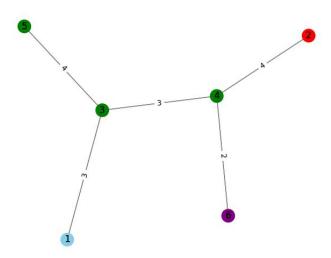


Figure 21: Park numer 3

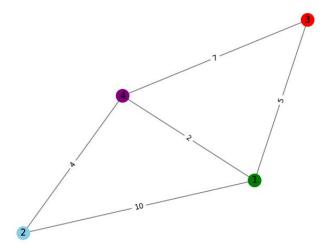


Figure 22: Park numer 4

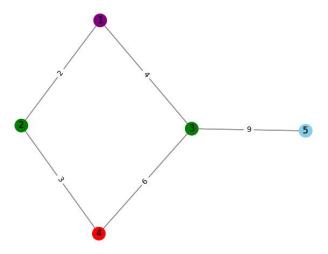


Figure 23: Park numer 5

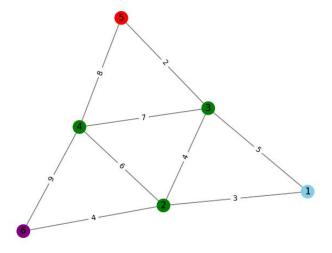


Figure 24: Park numer 6

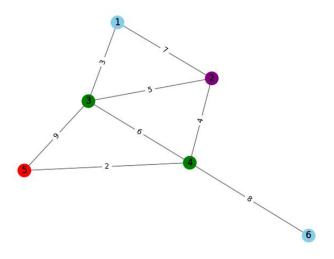


Figure 25: Park numer 7

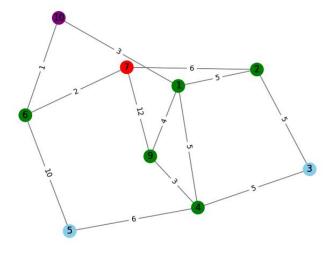


Figure 26: Park numer 8

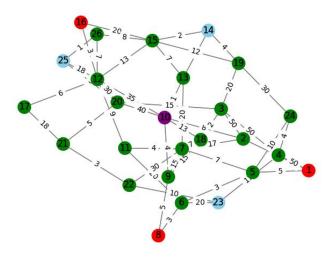


Figure 27: Park numer 9