

FINALS CYCLES JAVA

```
class Pair{
    int e,w;
    Pair(int a, int b){
        e=a;
        w=b;
    }
}

class Result {

    static ArrayList<Pair>[] arr = new ArrayList[26];
    static ArrayList<Integer> cycles = new ArrayList<Integer>();

    public static int find_max_weight(String graph) {
        for(int i=0; i<26; i++) {
            arr[i] = new ArrayList<Pair>();
        }

        String[] inputs = graph.split(" ");
        for(int i=0; i<inputs.length; i+=2) {
            int a = inputs[i].charAt(0)-'A';
            int b = inputs[i].charAt(1)-'A';
            int c = Integer.parseInt(inputs[i+1]);
            arr[a].add(new Pair(b,c));
        }

        for(int i=0; i<26; i++) {
            findCycles(0,"",i,i);
        }
    }
}
```

```
int max = Integer.MIN_VALUE;
```

```
for(int i : cycles) {
```

```
    if(i>max) {
```

```
        max = i;
```

```
    }
```

```
}
```

```
if(cycles.size()==0) {
```

```
    max = 0;
```

```
}
```

```
return max;
```

```
}
```

```
public static void findCycles(int weight, String visited, int c, int o) {
```

```
    for(Pair i : arr[c]) {
```

```
        if(i.e==o) {
```

```
            cycles.add(weight+i.w);
```

```
        }
```

```
        else if(!visited.contains(i.e+"")) {
```

```
            findCycles(weight+i.w,visited+i.e,i.e,o);
```

```
        }
```

```
    }
```

```
}
```

```
}
```