Masgras Vlad-Florian
Grupa 341

Concepte si Aplicatii in Vederea Artificiala - Tema 1

num_pieces_horizontal = 25

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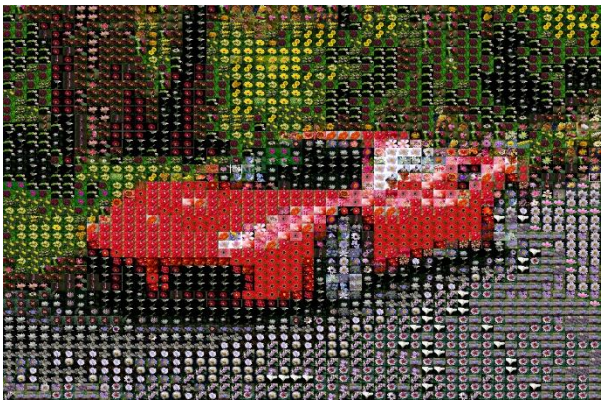
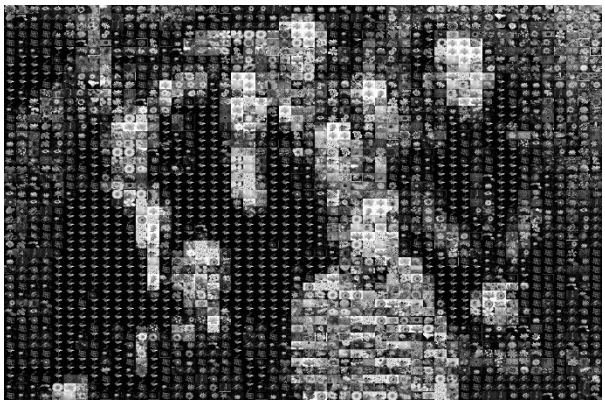
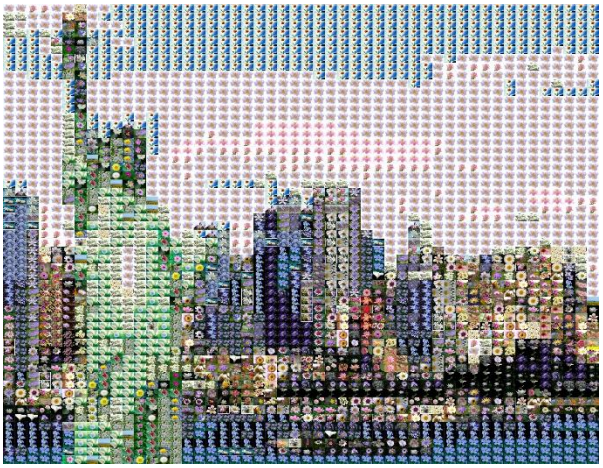
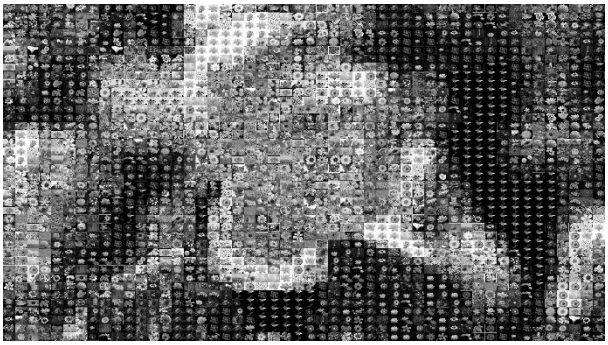
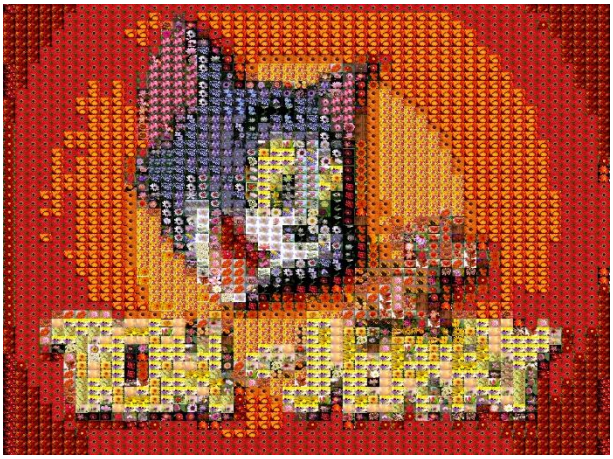
num_pieces_horizontal = 50











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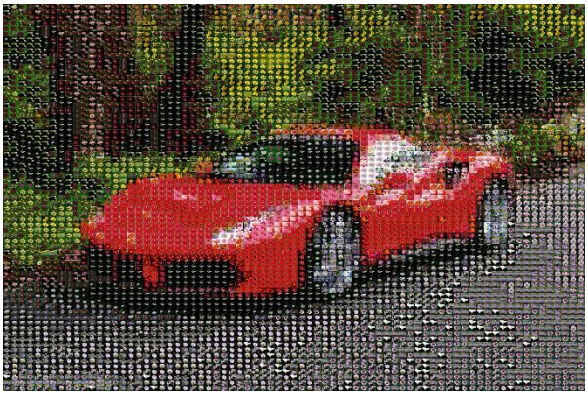
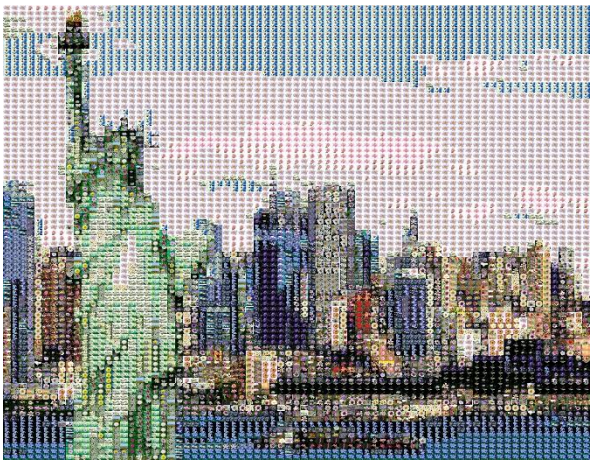
num_pieces_horizontal = 75





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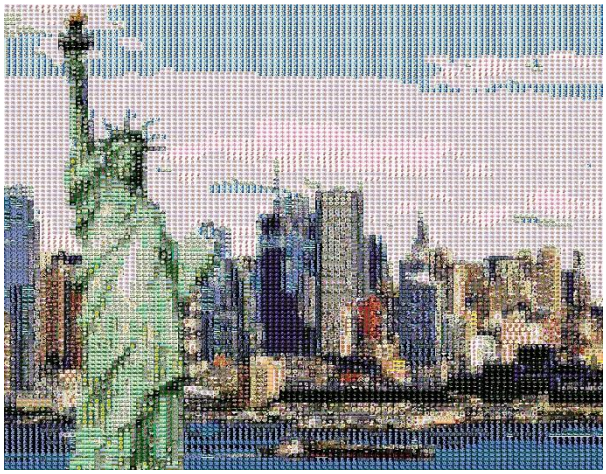
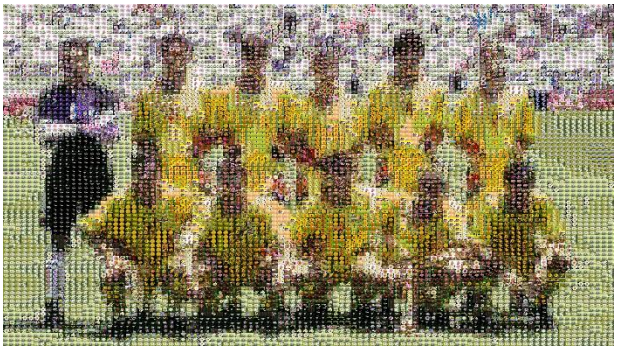
num_pieces_horizontal = 100





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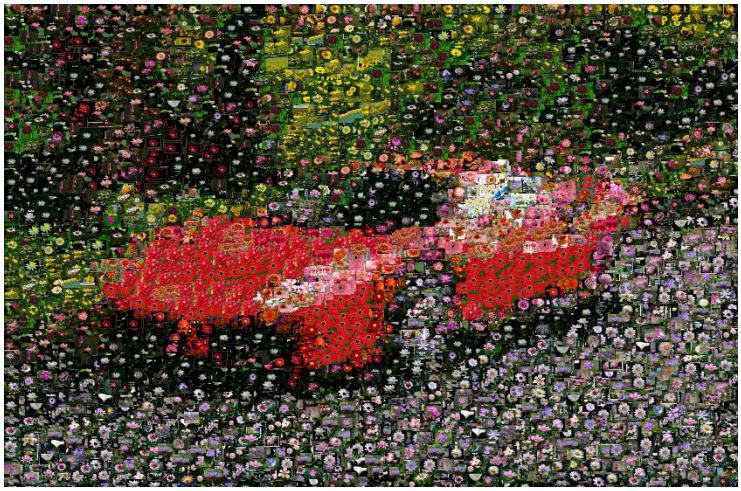
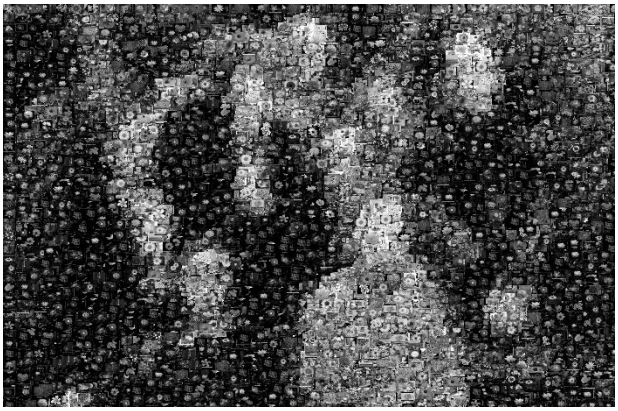
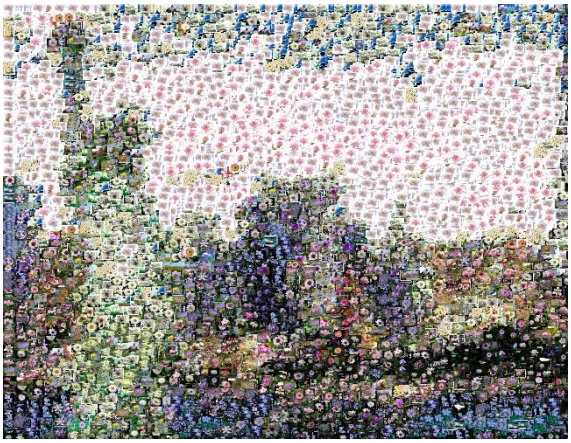
Se poate observa cu usurinta ca algoritmul are rezultate mai bune si detaliile se disting mai usor prin marirea parametrului num_pieces_horizontal care determina numarul de imagini de pe orizontala imaginii rezultate. De la imaginile formate prin setarea parametrului la 25, in care detaliile se disting greu si este complicat sa iti dai seama ce se afla in poza, se ajunge in final ca prin setarea parametrului la 100, imaginile rezultate sa fie mult mai clare si apropiate de imaginile initiale.

(b)



Imagine obtinuta cu modul de aranjare 'aleator'





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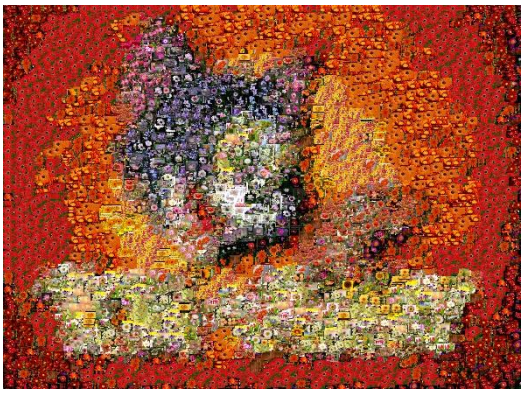
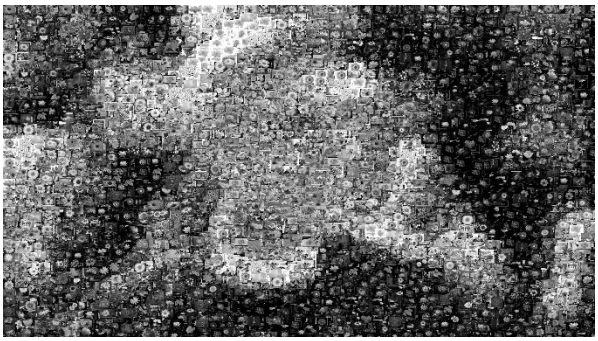
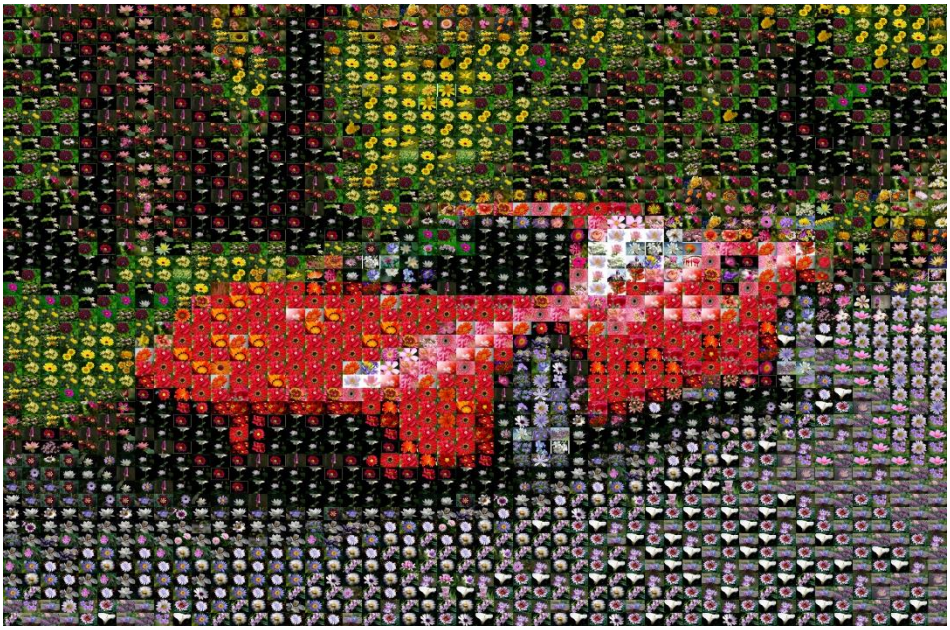




Spre deosebire de modul de aranjare ”caroiaj”, aceasta metoda determina aparitia suprapunerilor. Pentru exemplele afisate mai sus am setat num_pieces_horizontal = 50.

(c)



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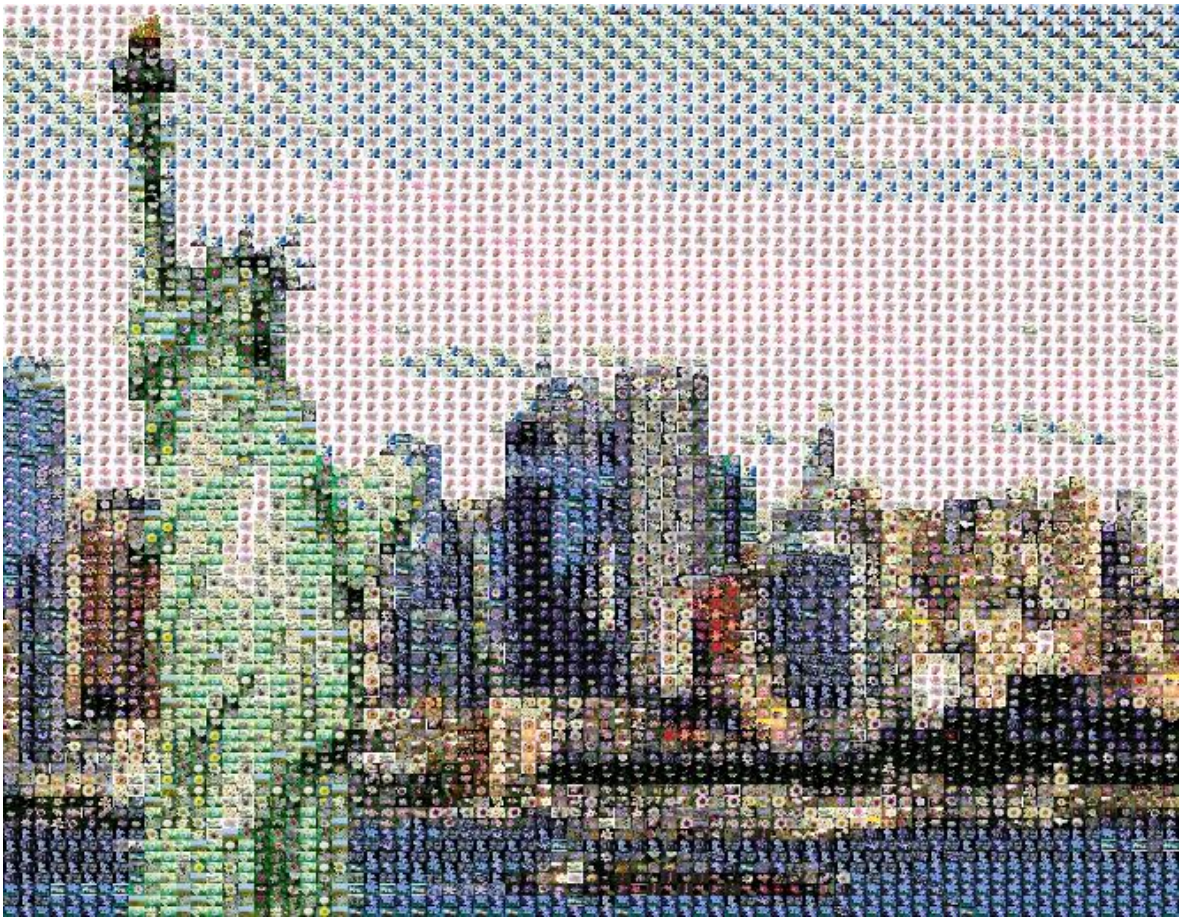

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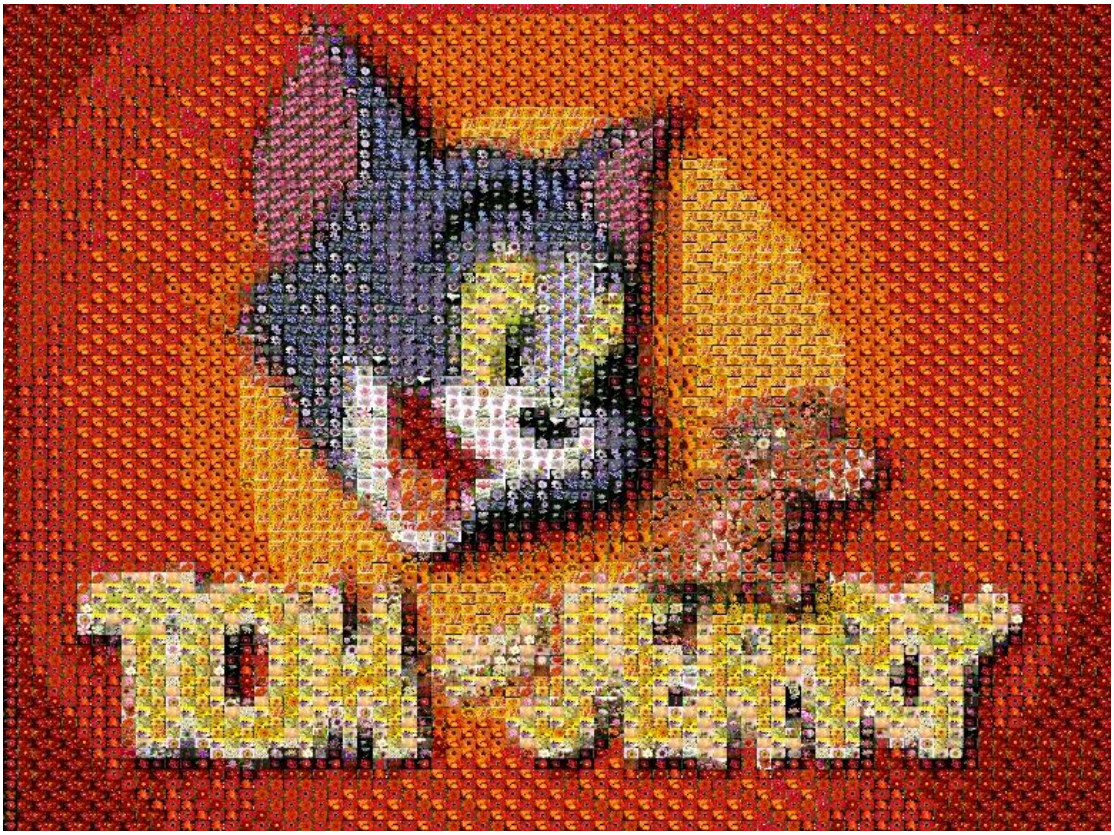

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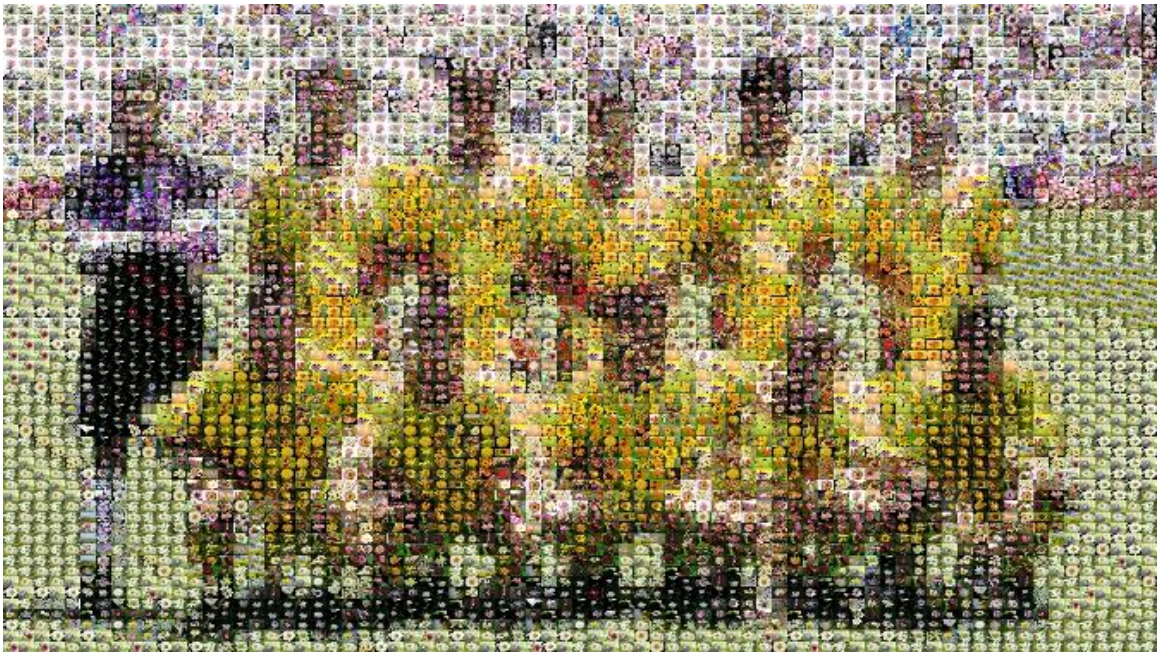

Imaginile afisate mai sus demonstreaza criteriul 4connect potrivit caruia, nicio imagine din componenta mozaicului nu are voie sa fie identica cu oricare din cei 4 vecini ai sai (stanga, dreapta, sus, jos)

(d)

Imagine a unui avion formata din piese cu avioane

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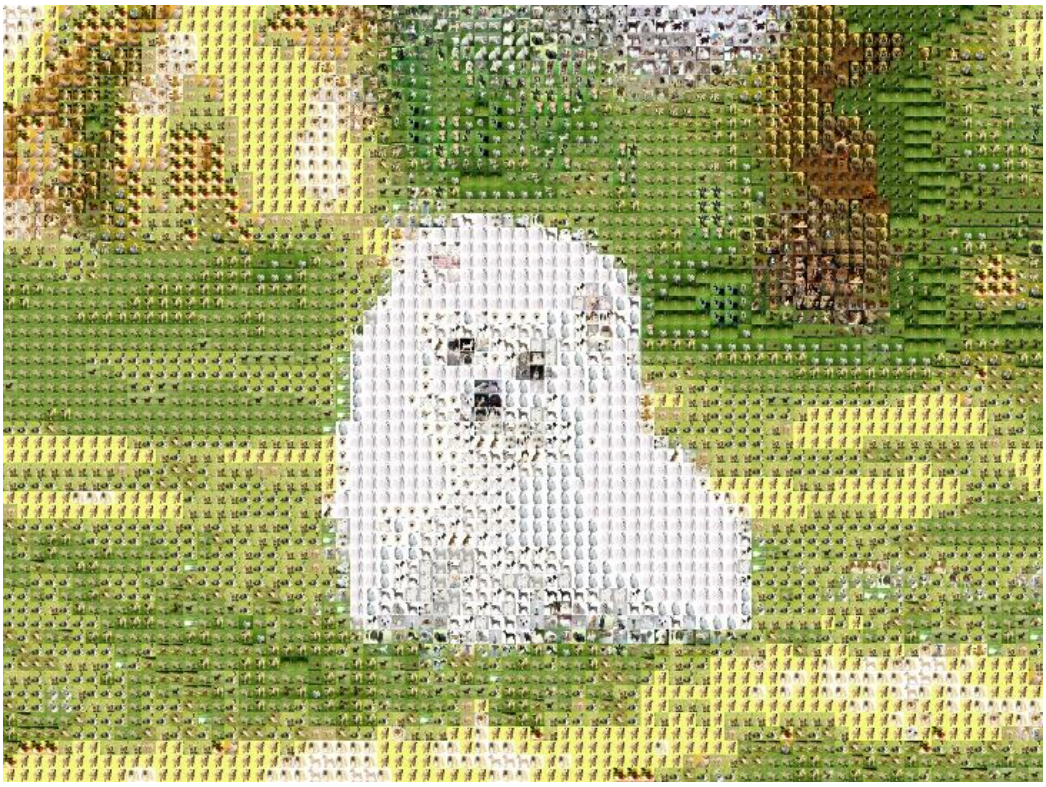

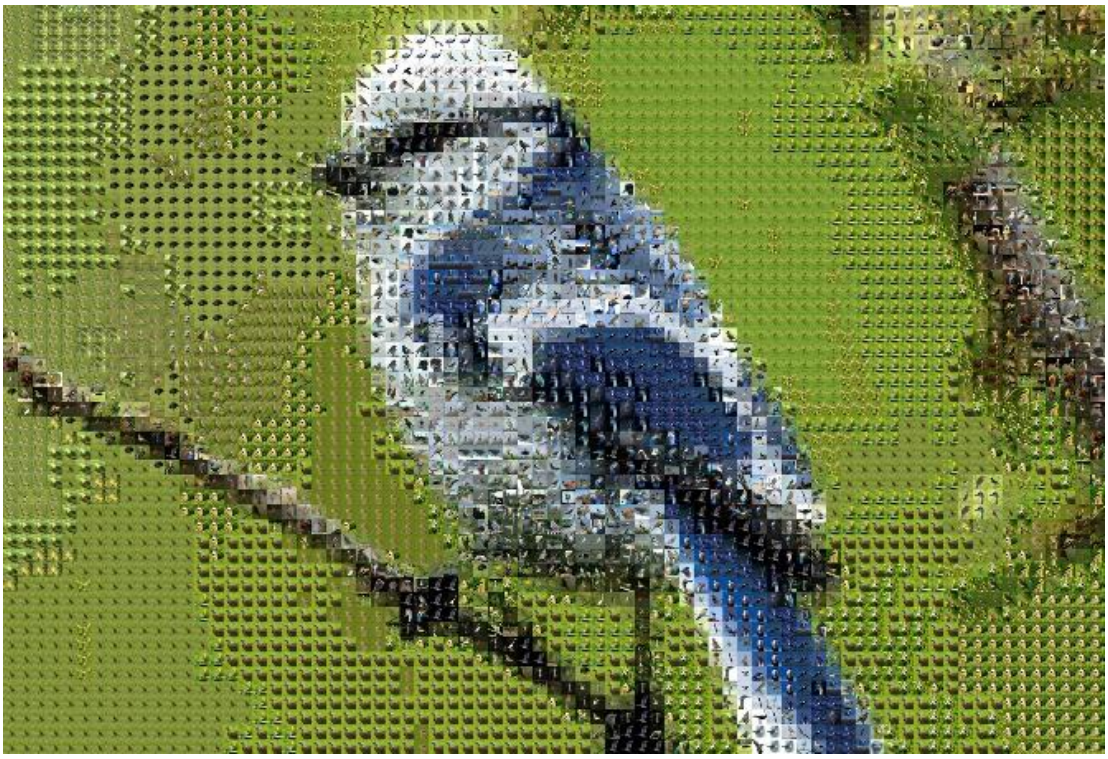

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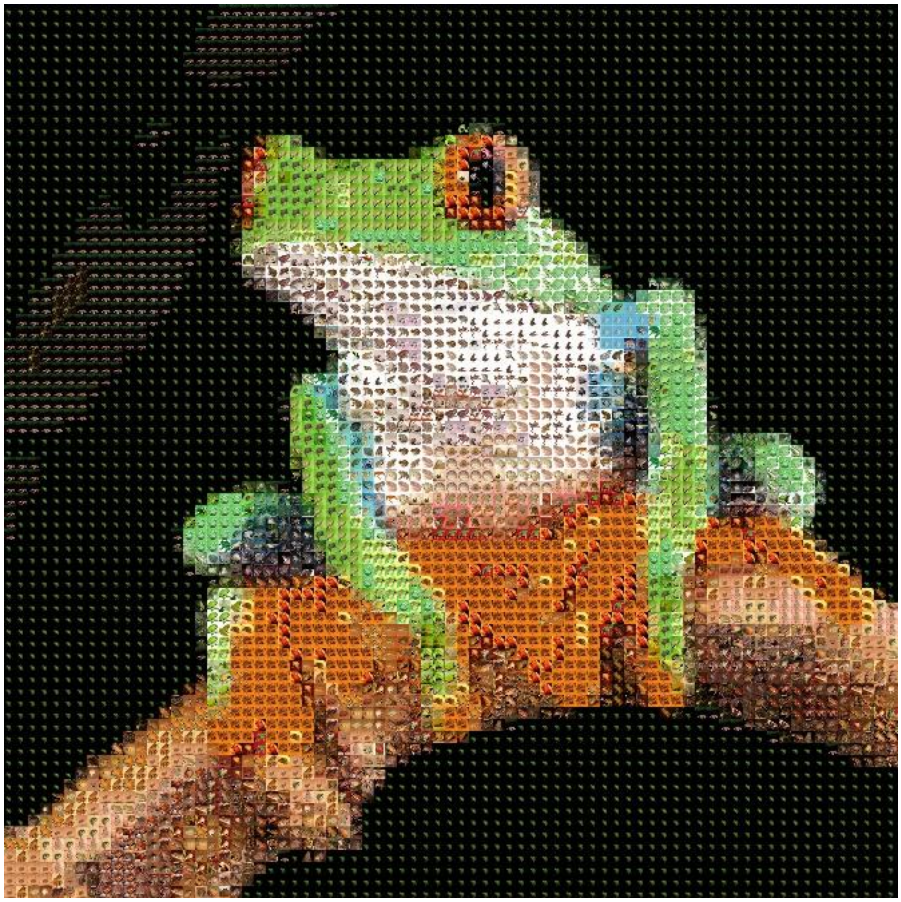

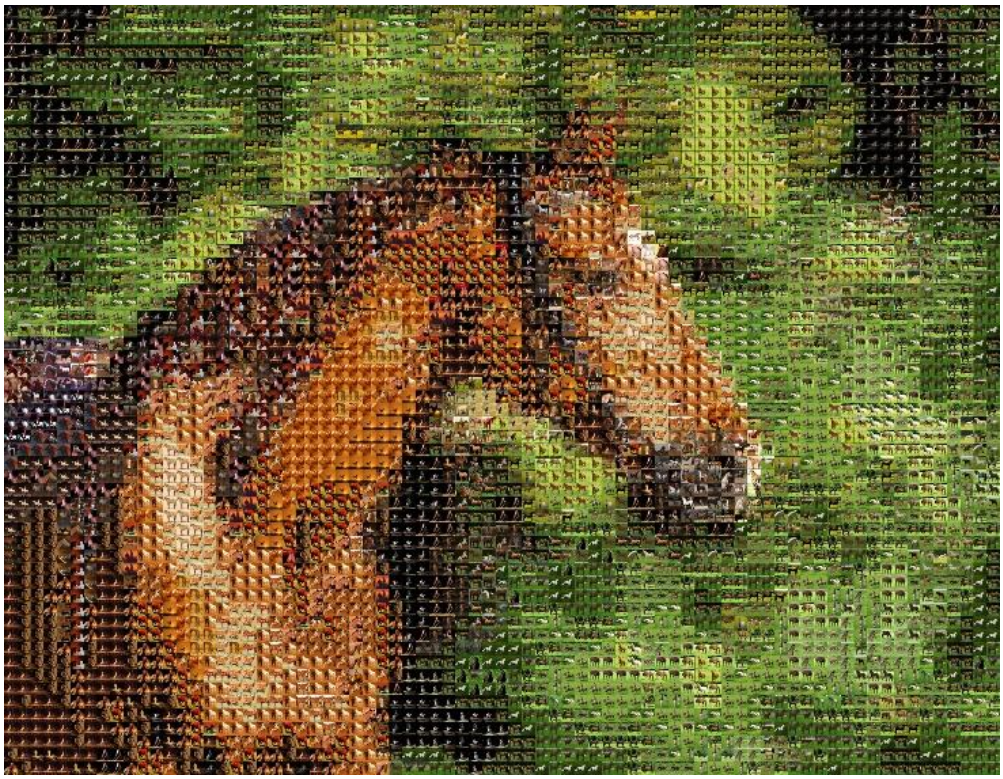

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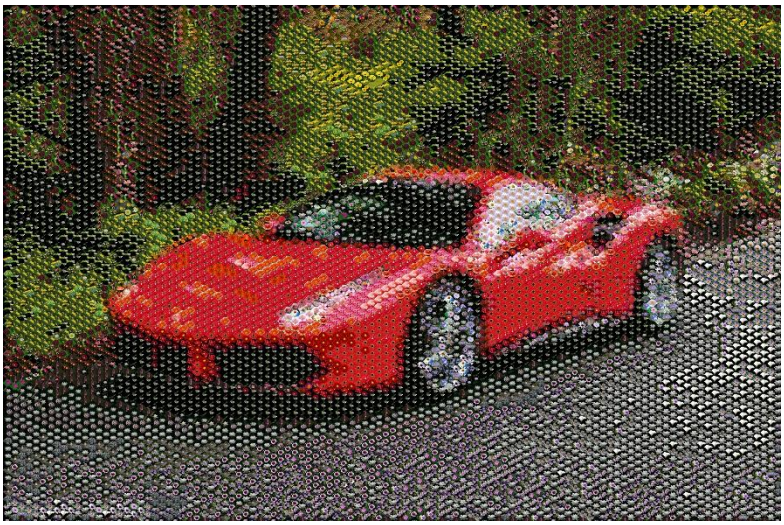
Pentru punctul anterior am inlocuit colectia de flori cu alte colectii ce cuprind piese de 32x32 pixeli, corespunzatoare cu imaginea initiala.

(e)



Imagine formata din piese hexagonale

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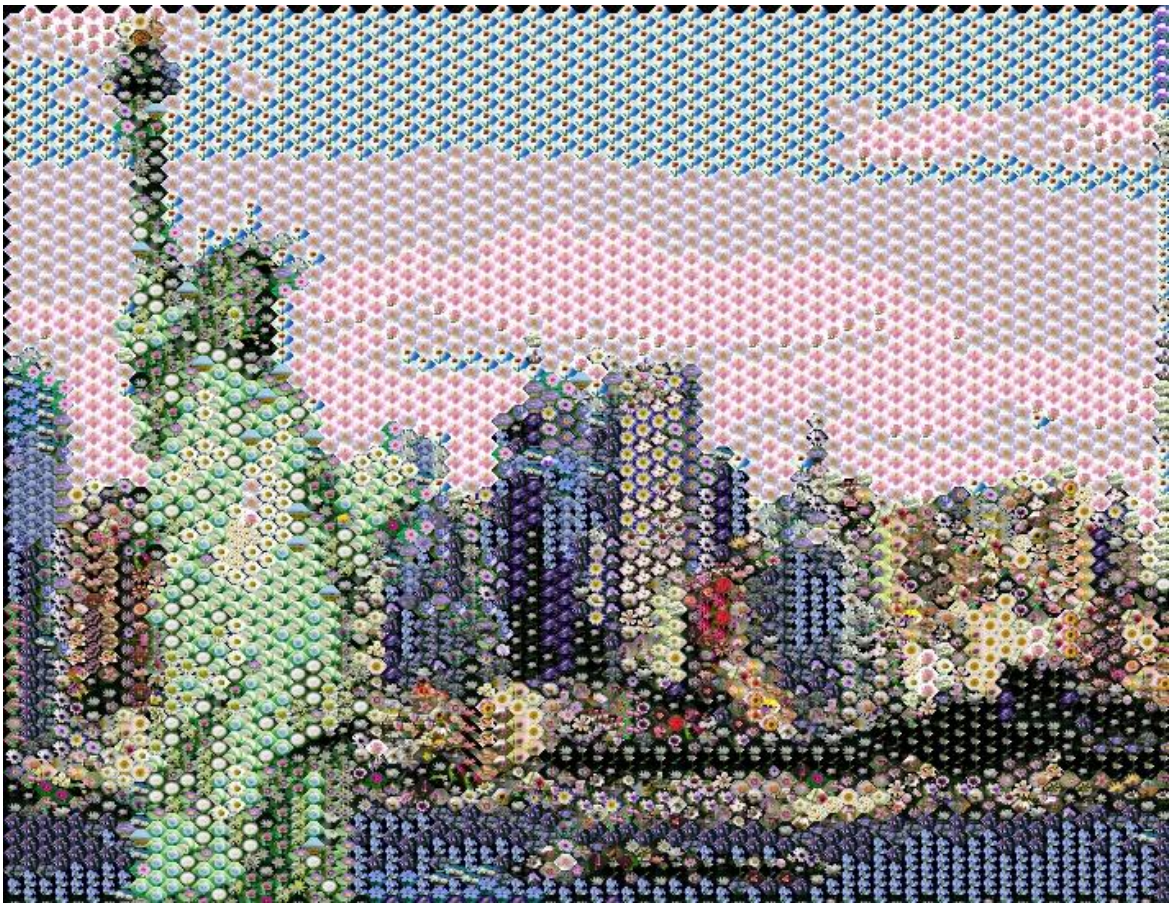

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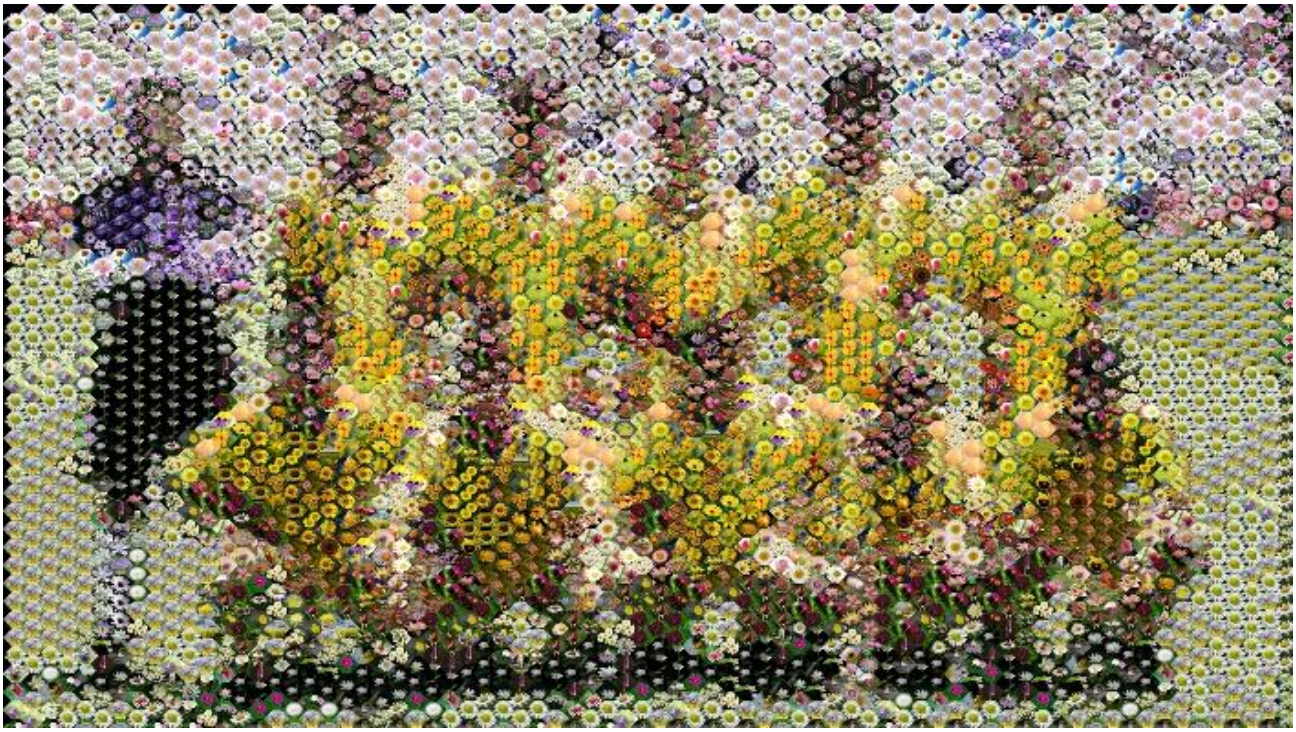

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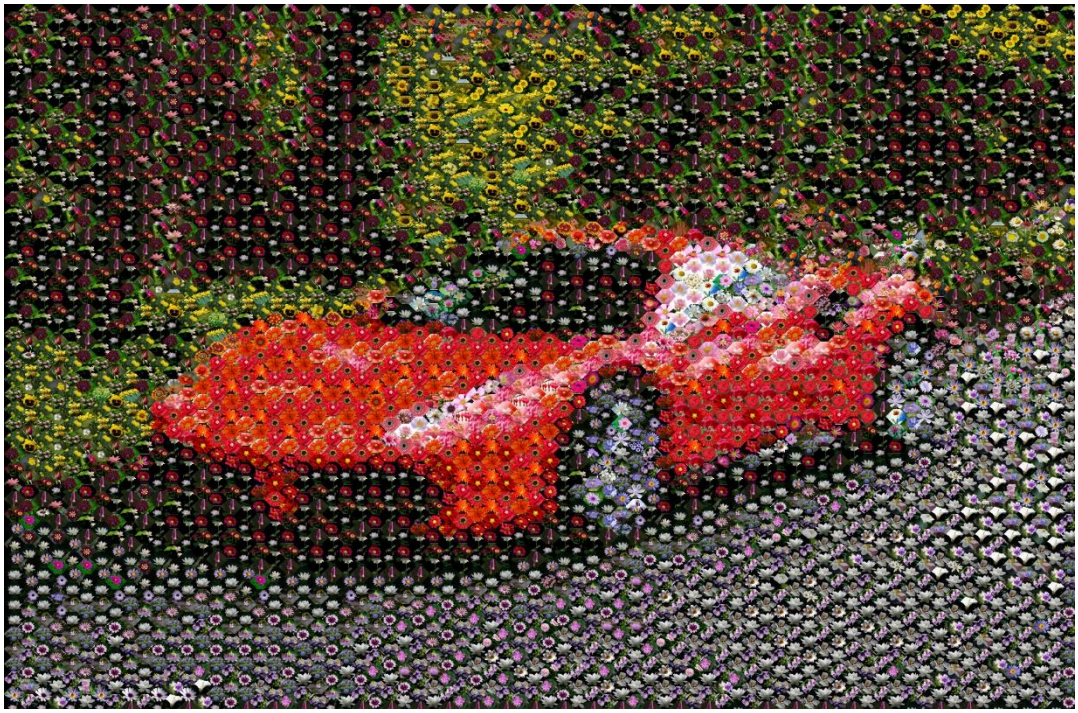
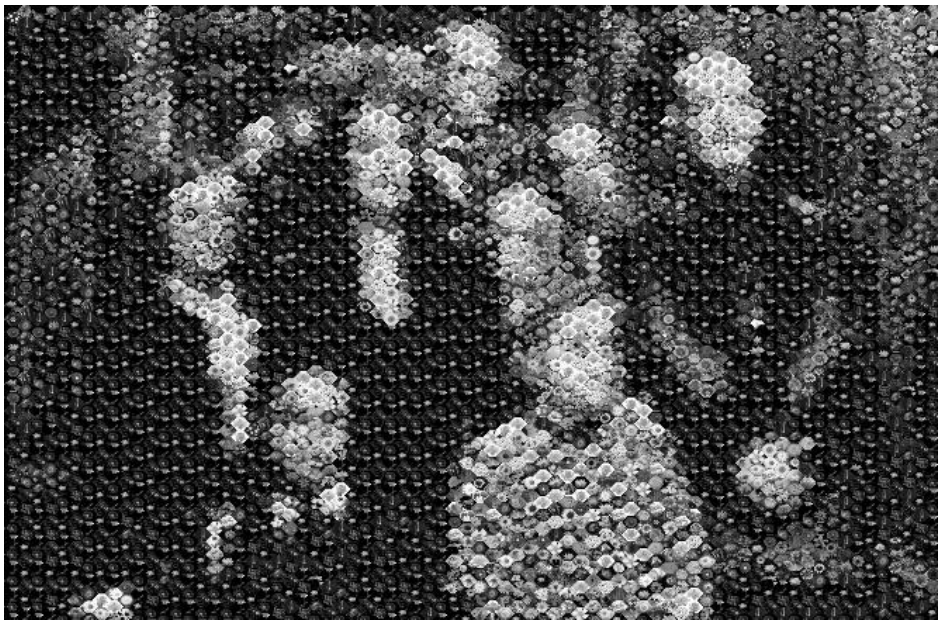
La acest pas, am avut de realizat mozaicuri folosind piese hexagonale pe care le-am obtinut cu ajutorul unei masti de 0 si 1 cu care am inmultit piesele dreptunghiulare

(f)



Imagine care respecta criteriul celor 6 vecini



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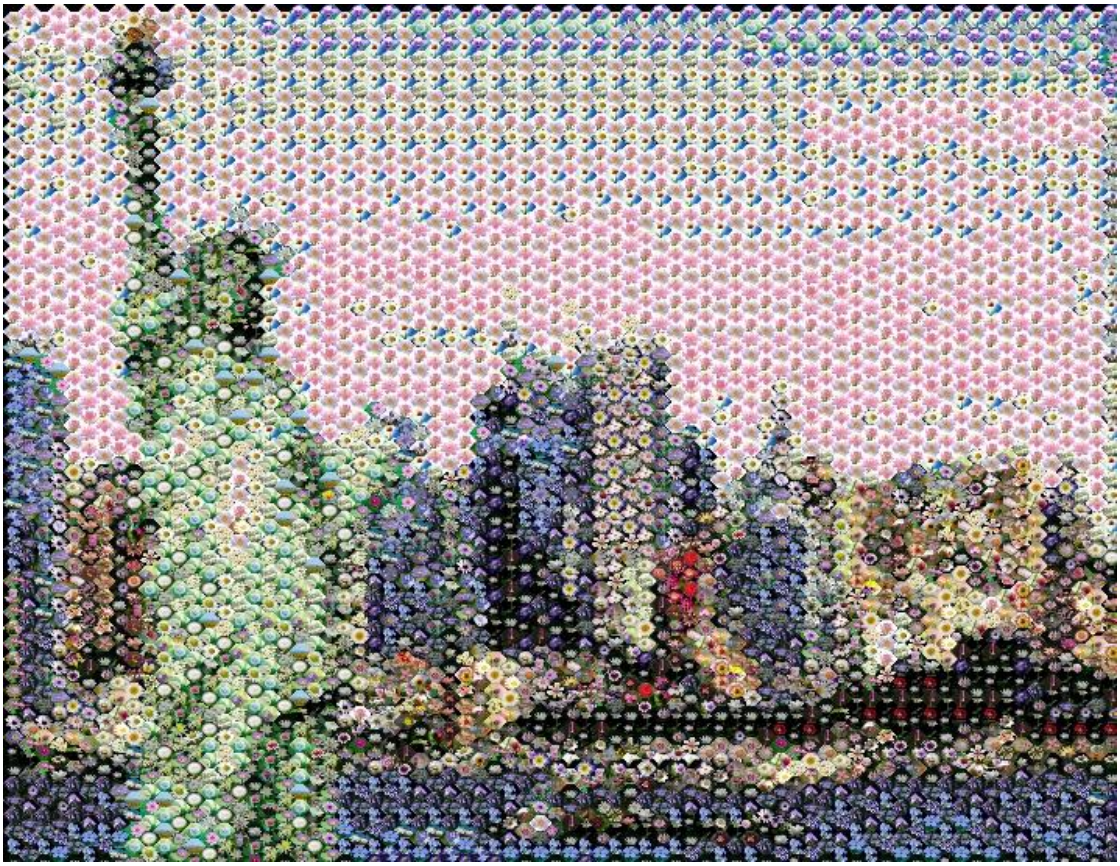

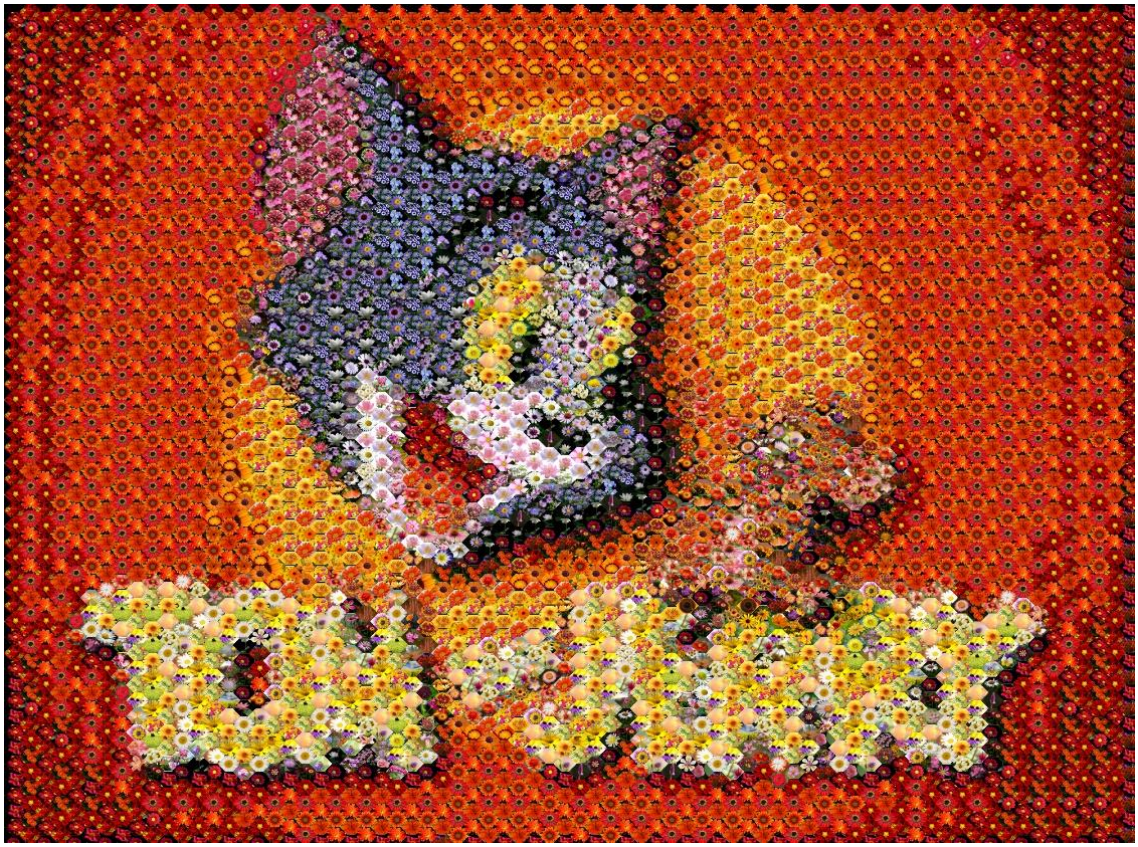

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Pentru punctul (f), imaginile respecta regula celor 6 vecini, mai exact fiecare piesa este diferita de toti cei 6 vecini ai sai.

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