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Программирование

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| **file=open('27-72a.txt')**  **A=[]**  **B=[]**  **for j in file:**  **j=j.split()**  **print(j)**  **input()** |  |

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| **Распределяем точки по кластерам** | | | |
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| file=open('27-72a.txt')  A=[]  B=[]  for j in file:  ## j=j.split()  ## print(j)  ## input()  x,y=map(float,j.split())  ## print(x,y)  ## input()  **if (x<0 and y>4)or(y<-10\*x/7+10 and x>=0 and y>-2\*x+4):**  **A.append([x,y])**  **if (y>-10\*x/7+10 and x<=6) or((y>-10\*x/7+10) and(x>6 and y<7)):**  **B.append([x,y])** | | | |

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| --- |
| file=open('27-72a.txt')  A=[]  B=[]  for j in file:  x,y=map(float,j.split())  **if (x<0 and y>4)or(y<-10\*x/7+10 and x>=0 and y>-2\*x+4):**  **A.append([x,y])**  **if (y>-10\*x/7+10 and x<=6) or((y>-10\*x/7+10) and(x>6 and y<7)):**  **B.append([x,y])**  print (len(A))  print(len(B)) |

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| **Пишем функцию для нахождения центра каждого кластера** |

**R2=|N2N1|+|N2N3|+|N2N4|**

MIN И

КООРДИНАТЫ

МИНИМУМА

**R3=|N3N1|+|N3N2|+|N3N4|**

**R4=|N4N1|+|N4N2|+|N4N3|**

**N1(X1,Y1)**

**N3(X3,Y3)**

**N2(X2,Y2)**

**N4(X4,Y4)**

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| **P1**  P2 |

N1, N2, N3, N4

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| *def f(n):*  *minn=10\*\*8*  ***for p1 in n:***  ***r=0***  ***x1=p1[0]***  ***y1=p1[1]***  ***for p2 in n:***  ***x2=p2[0]***  ***y2=p2[1]***  ***r+=((x1-x2)\*\*2+(y1-y2)\*\*2)\*\*0.5***  *if r<minn:*  *minn=r*  *xy=[x1,y1]*  *return xy* |
| *sp=f(A)*  *sp1=f(B)*  *print (int((sp[0]+sp1[0])/2\*10000))*  *print(int((sp[1]+sp1[1])/2\*10000))* |

***file=open('27-72a.txt')***

***A=[]***

***B=[]***

***for j in file:***

***x,y=map(float,j.split())***

***if (x<0 and y>4)or(y<-10\*x/7+10 and x>=0 and y>-2\*x+4):***

***A.append([x,y])***

***if (y>-10\*x/7+10 and x<=6) or((y>-10\*x/7+10) and(x>6 and y<7)):***

***B.append([x,y])***

***print (len(A))***

***print(len(B))***

***#пишем функцию для нахождения центра каждого кластера***

***def f(n):***

***minn=10\*\*8***

***for p1 in n:***

***r=0***

***x1=p1[0]***

***y1=p1[1]***

***for p2 in n:***

***x2=p2[0]***

***y2=p2[1]***

***r+=((x1-x2)\*\*2+(y1-y2)\*\*2)\*\*0.5***

***if r<minn:***

***minn=r***

***xy=[x1,y1]***

***return xy***

Вызываем функцию для вычисления центра каждого кластера

***sp=f(A)***

***sp1=f(B)***

***print (int((sp[0]+sp1[0])/2\*10000))***

***print(int((sp[1]+sp1[1])/2\*10000))***