

Bioenformatik 2 Uygulama Hafta

1.

A C G C G T G A C A A A
C C G G T A T G A G G A

DNA Özdeşlik Matrisi

	A	C	G	T
A	1	0	0	0
C	0	1	0	0
G	0	0	1	0
T	0	0	0	1

$$\begin{aligned} C-C &= 1 \\ G-G &= 1 \\ T-T &= 1 \\ A-A &= 1 + \\ &= 4 \end{aligned}$$

Hesaplama sonucu 4

2 N F R A V M M I F
 I I I I I
 M I V M A I L K Q

$$I-I=5$$

$$V-V=4$$

$$M-M=6$$

$$I-I=5$$

$$M-A=1$$

19 \Rightarrow Hizalama shoru 19

3 Y P Y P Y Y D H
 I I I I I I I
 Y H - P - N - H Y

$$Y-Y=7$$

$$H-H=\frac{8}{15}+$$

Hizalama shoru 15

4

	-	V	F	M	M	H	E
-	0	0	0	0	0	0	0
V	0	0	0	0	0	0	0
M	0	0	0	1	1	0	0
M	0	0	0	1	2	0	0
H	0	0	0	0	0	3	1
E	0	0	0	0	0	1	4
R	0	0	0	0	0	0	2
A	0	0	0	0	0	0	0

V F M M H E
 I I I I I
 G M M H E RA

Hizalama shoru = 4

5.

	-	A	A	C	C	T	A	T	A	G	C	T
-	0	0	0	0	0	0	0	0	0	0	0	0
G	0	0	0	0	0	0	0	0	0	1	0	0
C	0	0	0	1	1	0	0	0	0	0	2	0
G	0	0	0	0	0	0	0	0	0	1	0	0
A	0	1	1	0	0	0	1	0	1	0	0	0
T	0	0	0	0	0	(1)	0	1	0	0	0	1
A	0	1	1	0	0	0	(2)	0	1	0	0	0
T	0	0	0	0	0	1	0	(3)	0	0	0	1
A	0	1	1	0	0	0	2	1	(4)	2	0	0

A A C C T A T A G C T
 G C G A T A T A

Hizalama skoru = 4