



## C++ Mülakat Soruları:

### Soru 1

Aşağıdaki dizide çarpımları en büyük sonucu veren 4 ardışık rakam:  $9 \times 9 \times 8 \times 7 = 4536$  dir. Bu 4 rakamın dizi içindeki konumu 365. elemandan başlamaktadır.

`uint8_t buffer[1000] = {`

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6,4,0,7,7,1,7,6,5,3,1,3,3,0,6,2,4,9,1,9,2,2,5,1,1,9,6,7,4,4,2,6,5,7,4,7,4,2,3,5,5,3,4,9,1,9,4,9,3,4,9,6,9,8,3,5,2,0,3,1,
2,7,7,4,5,0,6,3,2,6,2,3,9,5,7,8,3,1,8,0,1,6,9,8,4,8,0,1,8,6,9,4,7,8,8,5,1,8,4,3,8,5,8,6,1,5,6,0,7,8,9,1,1,2,9,4,9,4,9,5,
4,5,9,5,0,1,7,3,7,9,5,8,3,3,1,9,5,2,8,5,3,2,0,8,8,0,5,5,1,1,1,2,5,4,0,6,9,8,7,4,7,1,5,8,5,2,3,8,6,3,0,5,0,7,1,5,6,9,3,2,
9,0,9,6,3,2,9,5,2,2,7,4,4,3,0,4,3,5,5,7,6,6,8,9,6,6,4,8,9,5,0,4,4,5,2,4,4,5,2,3,1,6,1,7,3,1,8,5,6,4,0,3,0,9,8,7,1,1,1,2,
1,7,2,2,3,8,3,1,1,3,6,2,2,9,8,9,3,4,2,3,3,8,0,3,0,8,1,3,5,3,3,6,2,7,6,6,1,4,2,8,2,8,0,6,4,4,4,4,8,6,6,4,5,2,3,8,7,4,9,
3,0,3,5,8,9,0,7,2,9,6,2,9,0,4,9,1,5,6,0,4,4,0,7,7,2,3,9,0,7,1,3,8,1,0,5,1,5,8,5,9,3,0,7,9,6,0,8,6,6,7,0,1,7,2,4,2,7,1,2,
1,8,8,3,9,9,8,7,9,7,9,0,8,7,9,2,2,7,4,9,2,1,9,0,1,6,9,9,7,2,0,8,8,8,0,9,3,7,7,6,6,5,7,2,7,3,3,3,0,0,1,0,5,3,3,6,7,8,8,1,
2,2,0,2,3,5,4,2,1,8,0,9,7,5,1,2,5,4,5,4,0,5,9,4,7,5,2,2,4,3,5,2,5,8,4,9,0,7,7,1,1,6,7,0,5,5,6,0,1,3,6,0,4,8,3,9,5,8,6,4,
4,6,7,0,6,3,2,4,4,1,5,7,2,2,1,5,5,3,9,7,5,3,6,9,7,8,1,7,9,7,7,8,4,6,1,7,4,0,6,4,9,5,5,1,4,9,2,9,0,8,6,2,5,6,9,3,2,1,9,7,
8,4,6,8,6,2,2,4,8,2,8,3,9,7,2,2,4,1,3,7,5,6,5,7,0,5,6,0,5,7,4,9,0,2,6,1,4,0,7,9,7,2,9,6,8,6,5,2,4,1,4,5,3,5,1,0,0,4,7,4,
8,2,1,6,6,3,7,0,4,8,4,4,0,3,1,3,9,8,9,0,0,0,8,8,9,5,2,4,3,4,5,0,6,5,8,5,4,1,2,2,7,5,8,8,6,6,6,8,8,1,1,6,4,2,7,1,7,1,4,7,
9,9,2,4,4,4,2,9,2,8,2,3,0,8,6,3,4,6,5,6,7,4,8,1,3,9,1,9,1,2,3,1,6,2,8,2,4,5,8,6,1,7,8,6,6,4,5,8,3,5,9,1,2,4,5,6,6,5,2,9,
4,7,6,5,4,5,6,8,2,8,4,8,9,1,2,8,8,3,1,4,2,6,0,7,6,9,0,0,4,2,2,4,2,1,9,0,2,2,6,7,1,0,5,5,6,2,6,3,2,1,1,1,1,1,0,9,3,7,0,5,
4,4,2,1,7,5,0,6,9,4,1,6,5,8,9,6,0,4,0,8,0,7,1,9,8,4,0,3,8,5,0,9,6,2,4,5,5,4,4,4,3,6,2,9,8,1,2,3,0,9,8,7,8,7,9,9,2,7,2,4,
4,2,8,4,9,0,9,1,8,8,8,4,5,8,0,1,5,6,1,6,6,0,9,7,9,1,9,1,3,3,8,7,5,4,9,9,2,0,0,5,2,4,0,6,3,6,8,9,9,1,2,5,6,0,7,1,7,6,0,6,
0,5,8,8,6,1,1,6,4,6,7,1,0,9,4,0,5,0,7,7,5,4,1,0,0,2,2,5,6,9,8,3,1,5,5,2,0,0,0,5,5,9,3,5,7,2,9,7,2,5,7,1,6,3,6,2,6,9,5,6,
1,8,8,2,6,7,0,4,2,8,2,5,2,4,8,3,6,0,0,8,2,3,2,5,7,5,3,0,4,2,0,7,5,2,9,6,3,4,5,0};
```

Yukarıdaki diziyi kullanarak 13 ardışık çarpımı en yüksek sonuçları veren serilerin başlangıç ve bitiş sırasını, çarpım sonucunu çıkaran en kısa programı aşağıdaki kurallara ve yazım örneğindeki yapıya dikkat ederek, C++ dili kullanarak yazınız.

Bonus: Program herhangi bir X elemanlı diziye uygun olarak yazılmalı ve 15 ardışık sayıya kadar hesaplayabilmelidir.

### Soru 2

Birbirleri arasında en az 5 fark olacak şekilde 0 - 20 arasında 10 tane random sayı üretip arraye dizelim. (5 -> 10 , 3 -> 8)

örnek çıktı : 1, 6, 15, 7, 2, 20, 0, 7, 12, 18

### Notlar:

\* Program olabildiğince hızlı ve gereksiz işlemlerden arındırılmış olmalı, en az bir tane değer alan veya döndüren fonksiyonlar ve pointerlar barındırmalıdır.

\* Program satırlarında açıklayıcı yorumlar bulunmalıdır.

\* Program çıktılarını kodunuzun başına isim soyisim tarih ve altına sonuçlar olarak belirterek yorum satırına yazınız.

\*Soruları tamamladıktan sonra çalışan proje dosyalarını mail yoluyla iletiniz.

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