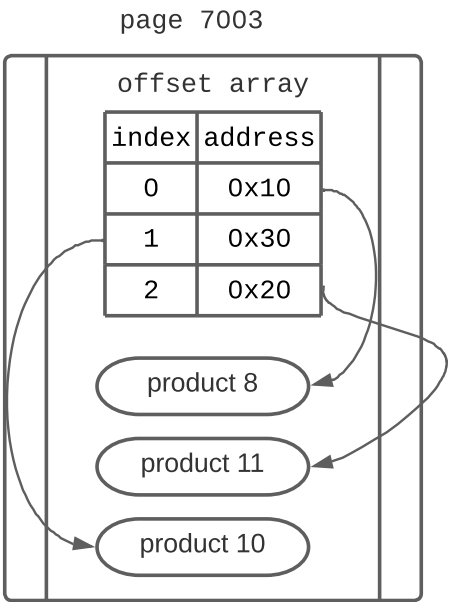


page splits

assume we have this page



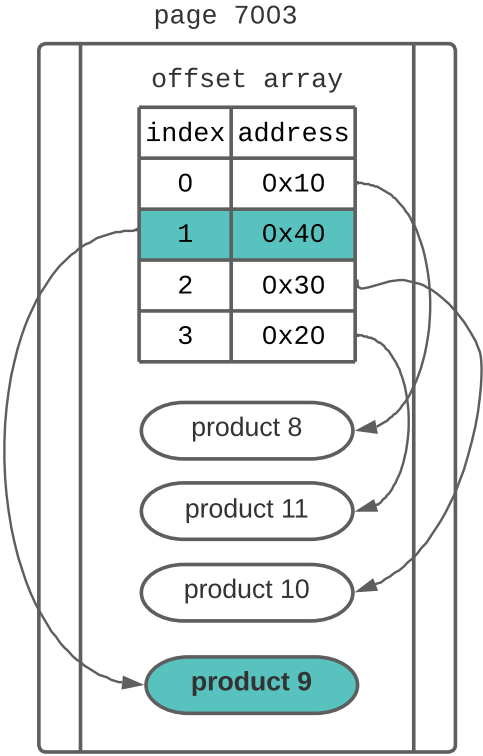
we need to insert product 9 on product clustered index table :

```
Insert into [dbo].[Product] Values ( 9 , 'Product 9' , 170 , 90 );
```

how database engine will insert this row physically ?

first step : database engine will **determine** the data page which the row must be inserted to it to keep the order , then database engine will **check** if there available space to insert this row at this page ?

second step : **if yes** : database engine will **attach** this row at the end of data page and **refactor** offset array to maintenance order of data



third step : **if no** : database engine will **split** the page to two pages and stored data with physical order on them .

