

Discounted Purchase

Write a function that takes a purchase amount and then calculates and applies a discount:

```
double discount(double amount);
```

The discount increases depending on the amount of the customer's purchase, according to the following table:

Purchase Amount	Discount
Less than \$50.00	5%
\$50.00 up to \$100.00	10%
\$100.00 or more	15%

The function should return the discounted cost (purchase amount minus the discount).

Files We Give You: A `makefile` and a sample main program (`discount.cpp`) to test your solution. The executable file created by a successful build will be named `discount`.

File You Must Submit: Place your solution code in a file named `solution.cpp`. This will be the only file you submit.

Examples

Input: `amount = 27.99`

Returns: `26.59`

Input: `amount = 50.00`

Returns: `45.00`

Input: `amount = 67.99`

Returns: `61.19`

Input: `amount = 100.00`

Returns: `85.00`

Input: `amount = 184.27`

Returns: `156.63`