

OBJECTIVE : You will learn how to:
1. Use if statements

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1. Calculating BMI (Body Mass Index):

$$\text{BMI} = \text{weight} / \text{square of height}$$

In this question, you will calculate BMI for the weight and height values which are **taking from the user**. According to the BMI;

(0-20) → Weak
(20-30) → Normal
(30-40) → Fat
(>40) → Risky

```
--- BMI CALCULATOR ---  
-> Enter your height(m):  
1.50  
-> Enter your weight(kg):  
70  
Calculating your BMI ...  
  
Your BMI Index: 31.11  
  
Fat!
```

2. Decide that number Even or odd, and multiple of 10 and even. The output should be:

```
Enter a number:100  
-----  
The number is multiple of 10 and EVEN  
-----
```

```
Enter a number:15  
-----  
The number is ODD  
-----
```

```
Enter a number:8  
-----  
The number is not multiple of 10 but EVEN  
-----
```

3. Write a program that takes the **age** as the **input** and prints the price of ticket for the users.
- If the age is less than 18 years old OR if the age is greater than or equal to 65, ticket price is 5.0
 - Otherwise ticket price is 7.5

<pre>Enter an age: 17 You're eligible for a discount! Your price is 5.0</pre>	<pre>Enter an age: 65 You're eligible for a discount! Your price is 5.0</pre>
---	---

```
Enter an age: 18
Sorry, no discount is available.
But our prices are so low you won't even notice!
Your price is 7.5
```

4. Blood Pressure Analyzer

Input: Blood pressure (Systolic, Diastolic) entered from keyboard (**integers**)

Compute: Determine what category that BP puts someone into

Output: Print the category the person is in to the screen

Elevated blood pressure:

Diastolic < 80 and Systolic between 120 and 129

Stage 1 Hypertension:

Diastolic between 80 and 89, or Systolic between 130 and 139

Stage 2 Hypertension:

Diastolic 90 or greater, Systolic 140 or greater

Danger Zone:

Stage 2 Hypertension, but Diastolic 120 or greater, or Systolic 180 or greater

Hypotension:

Diastolic 60 or lower, Systolic 90 or lower

Healthy:

If no condition is satisfied.

<pre>Enter your systolic pressure: 138 Enter your diastolic pressure: 89 You have stage 1 hypertension.</pre>	<pre>Enter your systolic pressure: 185 Enter your diastolic pressure: 120 Your blood pressure is in the danger zone!</pre>
---	--

<pre>Enter your systolic pressure: 81 Enter your diastolic pressure: 55 You have hypotension.</pre>	<pre>Enter your systolic pressure: 95 Enter your diastolic pressure: 65 Your blood pressure is in a healthy range.</pre>
---	--

ADDITIONAL QUESTION

EvrenJet Airlines has a promotion for domestic flights with the price **89.99 TL** (including tax amount). There are some special discounts as follows:

Speacial Case	Discount Rate								
Disabled passengers	%40								
Other passengers	Discounts will be applied according to the age of the passengers								
	<table border="1"><thead><tr><th>Age</th><th>Discount Rate</th></tr></thead><tbody><tr><td>> 65</td><td>%15</td></tr><tr><td>13-65</td><td>No discount</td></tr><tr><td>0-12</td><td>%33</td></tr></tbody></table>	Age	Discount Rate	> 65	%15	13-65	No discount	0-12	%33
	Age	Discount Rate							
	> 65	%15							
13-65	No discount								
0-12	%33								

A passenger has a 15 kg baggage allowance included in the price. If the baggage weight exceeds this limit, the passenger has to pay 6.00 TL per extra kg.

Write a C program that reads the age information and the disability status from the user; calculates the ticket payment according to information above. Also the baggage weight for the passenger will be read, if the baggage weight exceeds the limit, the program will calculate and display the extra payment. If the user enters a wrong answer for the disability information, a warning message will be displayed. Examine the example runs below.

Example Run #1:

```
Enter your age: 60
Disability ? (y/n): n
Ticket payment: 89.99 TL
Enter baggage weight: 15
```

Example Run #2:

```
Enter your age: 70
Disability ? (y/n): y
Ticket payment: 53.99 TL
Enter baggage weight: 15
```

Example Run #3:

```
Enter your age: 10
Disability ? (y/n): n
Ticket payment: 60.29 TL
Enter baggage weight: 15
```

Example Run #4:

```
Enter your age: 40
Disability ? (y/n): n
Ticket payment: 89.99 TL
Enter baggage weight: 21.25
Your baggage weight exceeds the limit with 6.25 kg, please pay 37.50 TL
```

Example Run #5:

```
Enter your age: 72
Disability ? (y/n): n
Ticket payment: 76.49 TL
Enter baggage weight: 18.75
Your baggage weight exceeds the limit with 3.75 kg, please pay 22.50 TL
```

Example Run #6:

```
Enter your age: 42
Disability ? (y/n): X
Invalid answer !!
```