CODE:

```
\documentclass{article}
\usepackage{graphicx} % Required for inserting images
\usepackage{multirow}
\usepackage{adjustbox}
\title{\huge\textbf{Different Forms of Tables
(Part-2)}}
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\date{\today}

\begin{document}
\maketitle
\section{Introduction}
This article explains how to use LaTeX to create and customize tables: changing size/spacing, showing caption of tables (below or above), use of positioning parameters, highlighting labels for tables, and changing the direction of the table.

\subsection{Sample 5}
\textbf{Captions, labels:}
There are two important commands used as follows:\\
\\
\indent 1. $\backslash$caption\{\}: This command is used to make a caption for the table which
is placed either above or below the table. \\
```

\indent 2. $\backslash$label\{\}: This command is used to refer to a table within a document.

\subsubsection{Positioning parameters and use of $\backslash$ref\{\} command:}

The parameter h! passed to the table environment declaration establishes that this table must be placed here, and override LATEX defaults as shown in Table 1, 2, and 3. The positioning parameters that can be passed in include:

\\

\indent• h\\

\indent \hspace{1mm} Will place the table here approximately.\\

\indent• t\\

\indent \hspace{1mm} Position the table at the top of the page.\\

\indent• b\\

\indent \hspace{1mm} Position the table at the bottom of the page.\\

\indent• p\\

\indent \hspace{1mm} Position the table at the top of the next page.\\

\newpage

```
\begin{table}
\begin{center}
   \begin{tabular}{|| c c c c ||}
   \hline
       Col1 & Col2 & Col2 & Col3 \\
   \hline
   \hline
      1 & 2 & 3 & 4 \\
```

```
    5 & 6 & 7 & 8 \\
    9 & 10 & 11 & 12 \\
    13 & 14 & 15 & 16 \\
    17 & 18 & 19 & 20 \\
  \hline
  \end{tabular}
  \caption{Table to test 1st positioning parameter (h!)}
  \label{table:1}
\end{center}
\end{table}

\begin{table}
\begin{center}
  \begin{tabular}{| c || c | c | c |}
  \hline
  \multicolumn{4}{|c|}{Country Name} \\
  \hline
  Country Name or Area Name & ISO ALPHA 2 code & ISO alpha 3 CODE & ISO Numeric code \\
  \hline
    Afghanistan & AF & AFG & 004 \\
    Aland Islands & AX & ALA & 004 \\
    Albania & AL & ALB & 008 \\
  \hline
  \end{tabular}
  \caption{Table to set up the width of table columns}
  \label{table:2}
```

\end{center}

\end{table}

\subsubsection{To set up the width of table columns}

Here we will see how we can set up the width of columns by specifying a particular width as shown in Table 2.

\subsubsection{How to put a caption on top of the Latex table and use of $\backslash$vspace\{\} command}

Here we will show how to put a caption on top of Latex table and adjust the height of the space between the caption and tabular by using the $\backslash$vspace\{\} command. Here the table is placed at the bottom of the page as shown in Table 3. The following symbols are available to describe the table columns: l- left-justified column, c - centered column, r- right-justified column. Here we have also shown that application.

% \begin{align}

% Table 3: Table to test 2nd positioning parameter (b) with the alignment of table columns and caption on top of table

% \end{align}

\begin{table}[h]

\begin{center}

  \caption{Table to test 2nd positioning parameter (b) with the alignment of table columns and caption on top of table \\}

  \label{table:3}

  \begin{tabular}{| c c c c |}

  \hline

    Col1 & Col2 & Col2 & Col3 \\

  \hline

  \hline

```
        1 & 6 & 87837 & 787 \\
        \hline
        2 & 7 & 78 & 5415 \\
        \hline
        3 & 545 & 778 & 7507 \\
        \hline
        4 & 545 & 18744 & 7560 \\
        \hline
        5 & 88 & 788 & 6344 \\
    \hline
    \end{tabular}

\end{center}
\end{table}

\subsection{Sample 6}
\textbf{Reducing the size of an entire Latex table: \\}
Here we will see how we are reducing the size of an entire Latex table by using the $\backslash$scalebox\{\} command as shown in Table 4. We also need to use the $\backslash$usepackage\{tcolorbox\} for implementing the below table.

\begin{table}[h]
    \centering \scalebox{0.75}{
    \begin{tabular}{| c c c c |}
    \hline
    Col1 & Col2 & Col3 & Col4 \\
```

```
    \hline \hline
    1 & 2 & 3 & 4\\
    1 & 2 & 3 & 4\\
    1 & 2 & 3 & 4\\
    1 & 2 & 3 & 4\\
    1 & 2 & 3 & 4\\
    \hline
    \end{tabular}}
    \caption{Table to show a reduction of the size of an entire Latex table}
    \label{table:4}
\end{table}

\subsection{Sample 7}

You can also change the mode to the landscape mode by using the $\backslash$usepackage\{adjustbox\}

command. The table here begins with the $\backslash$begin\{adjustbox\} and ends with the

$\backslash$end\{adjustbox\}.\\

The following Table \ref{table:5} and Table \ref{table:6} help us to understand this.

\begin{table}[h]
    \centering
    \begin{adjustbox}{angle=90}
    \begin{tabular}{|l|c|r}
    \textbf{heading 1} & \textbf{heading 2} & \textbf{heading 3} \\
        1 & 1.34 & a \\
        2 & 10.5 & b \\
```

```
    1 & 765.5231 & c \\
  \end{tabular}
  \end{adjustbox}
  \caption{Highlighting rotating of table, angle = 90 degree}
  \label{tab:5}
\end{table}

\newpage
```

For example, if we set the angle to 270 degrees in the same code as used for the implementation of the previous table (Table 5), the output will look like the image given below (Table 6):

```
\begin{table}[h]
  \centering
  \begin{adjustbox}{angle=270}
  \begin{tabular}{|l|c|r}
  \textbf{heading 1} & \textbf{heading 2} & \textbf{heading 3} \\
    1 & 1.34 & a \\
    2 & 10.5 & b \\
    1 & 765.5231 & c \\
  \end{tabular}
  \end{adjustbox}
  \caption{Highlighting rotating of table, angle = 270 degree}
  \label{tab:6}
\end{table}
\end{document}
```