

# Lab Report-7

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## Experiment: 07

**Experiment Name:** Identifying a valid identifier .

### Code:

```
// Exp No : 07
//Exp Name : Identifying a valid identifier

#include<stdio.h>
#include<string.h>

int main()
{
    char str[100];
    int i,length,count=0;

    printf("Enter the String: ");
    gets(str);
    length=strlen(str); // $ma44

    if((str[0]>='a'&&str[0]<='z')||(str[0]>='A'&&str[0]<='Z')||(str[0]=='$')||(str[0]
    =='_')||(str[0]=='-'))
    {
        for(i=1;i<length;i++)
        {

            if((str[i]>='a'&&str[i]<='z')||(str[i]>='A'&&str[i]<='Z')||(str[i]>='0'&&str[i]<
            ='9')||(str[i]=='$')||(str[i]=='_')||(str[i]=='-'))
                count=count+1;

        }
        if(length-1==count)
        {
            if((strcmp(str, "int")==0)||(strcmp(str, "double")==0)||(strcmp(str,
            "float")==0)||(strcmp(str, "for")==0)||(strcmp(str, "while")==0)||(strcmp(str,
```

```

    "if")==0)||strcmp(str, "else")==0)||strcmp(str, "brake")==0)||strcmp(str,
    "continue")==0))
    {
        printf("\n Keyword\n");
    }
    else
    {
        printf("\n Variable \n");
    }

}

}

}
else
{
    printf("\n Invalid Identifier\n");
}

return 0;
}

```

**Output:**

```
"E:\Mahmud\All Code\All Code\Compiler Code\Untitled1.exe"

Enter the String: if
    Keyword

Enter the String: for
    Keyword

Enter the String: brake
    Keyword

Enter the String: $mahmud
    Variable

Enter the String: s12
    Variable

Enter the String: int
    Keyword

Enter the String: 87k11
    Invalid Identifier

Enter the String: float
    Keyword

Enter the String: 98jamal
    Invalid Identifier

Enter the String: kamal
    Variable
```

## Discussion:

A string was first taken . Then the length of the string is found. The string is compared to the 0th index with `str[0]>='a'&&str[0]<='z'` or `str[0]>='A'&&str[0]<='Z'` or `'_'` or `'-'` or `'$'`.

**If the conditions are not tough declare Invalid Identifier .**

**If the conditions is true then execute for loop for checking next character .**

**If the string fully match to keyword then show message Keyword**

**Or not show message Variable.**