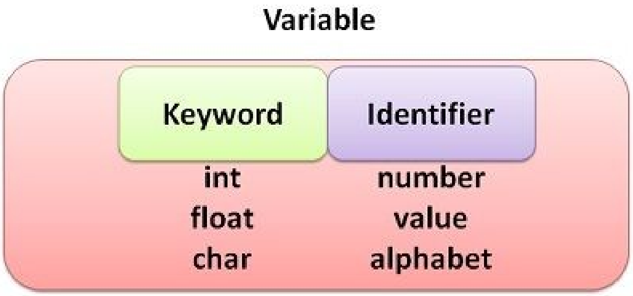
C Keywords and Identifiers

In this tutorial, you will learn about keywords; reserved words in C programming that are part of the syntax. Also, you will learn about identifiers and how to name them.



Character set

A character set is a set of alphabets, letters and some special characters that are valid in C language.

Alphabets

```
Uppercase: A B C ................................... X Y Z

Lowercase: a b c ...................................... x y z
```

C accepts both lowercase and uppercase alphabets as variables and functions.

Digits

```
0 1 2 3 4 5 6 7 8 9
```

Special Characters

Special Characters in C Programming

,	<	>	.	_
(	)	;	$	:
%	[	]	#	?
'	&	{	}	"
^	!	*	/	|
-	\	~	+	

White space Characters

Blank space, newline, horizontal tab, carriage return and form feed.

C Keywords

Keywords are predefined, reserved words used in programming that have special meanings to the compiler. Keywords are part of the syntax and they cannot be used as an identifier. For example:

```
int money;
```

As C is a case sensitive language, all keywords must be written in lowercase. Here is a list of all

keywords allowed in ANSI C.

C Keywords

auto	double	int	struct
break	else	long	switch
case	enum	register	typedef
char	extern	return	union
continue	for	signed	void
do	if	static	while
default	goto	sizeof	volatile
const	float	short	unsigned

C Identifiers

Identifier refers to name given to entities such as variables, functions, structures etc.

Identifiers must be unique. They are created to give a unique name to an entity to identify it during the execution of the program. For example:

```
int money;
double accountBalance;
```

Here, `money` and `accountBalance` are identifiers.
Also remember, identifier names must be different from keywords. You cannot use `int` as an identifier because `int` is a keyword.

Rules for naming identifiers

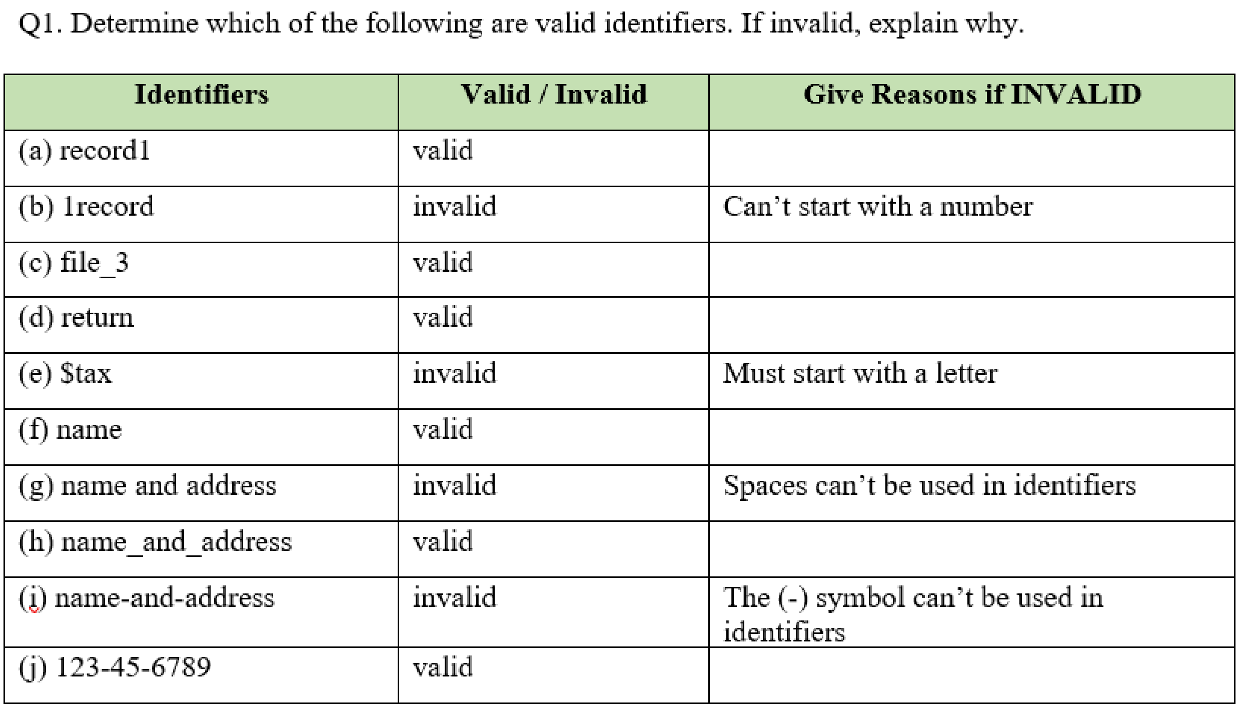
1.A valid identifier can have letters (both uppercase and lowercase letters), digits and underscores.

2.The first letter of an identifier should be either a letter or an underscore.

3.You cannot use keywords like `int`, `while` etc. as identifiers.

4.There is no rule on how long an identifier can be. However, you may run into problems in some compilers if the identifier is longer than 31 characters.

You can choose any name as an identifier if you follow the above rule, however, give meaningful names to identifiers that make sense.



Q1. Determine which of the following are valid identifiers. If invalid, explain why.

Identifiers	Valid / Invalid	Give Reasons if INVALID
(a) record1	valid	
(b) 1record	invalid	Can't start with a number
(c) file_3	valid	
(d) return	valid	
(e) $tax	invalid	Must start with a letter
(f) name	valid	
(g) name and address	invalid	Spaces can't be used in identifiers
(h) name_and_address	valid	
(i) name-and-address	invalid	The (-) symbol can't be used in identifiers
(j) 123-45-6789	valid	