Identifier :

A name in java program is called identifier. It may be class name, method name, variable name.

Example:

```
class Test
        └────1
{
public static void main(String[] args){
int x=10;
}   │            2     3   4
}   5
```

Rules to define java identifiers:

Rule 1: The only allowed characters in java identifiers are:

```
1) a to z
2) A to Z
3) 0 to 9
4) _  (underscore)
5) $
```

Rule 2: If we are using any other character we will get compile time error.
Example:

```
1) total_number-------valid
2) Total#-----------------invalid
```

Rule 3: identifiers are not allowed to start with digit.
Example:
```
1) ABC123---------valid
2) 123ABC---------invalid
```

Rule 4: java identifiers are case sensitive. java language itself treated as case sensitive language.
Example:
```
class Test{
int number=10;
int Number=20;
int NUMBER=20; we can differentiate with case.
int NuMbEr=30;
}
```

Rule 5: There is no length limit for java identifiers but it is not recommended to take more than 15 lengths.

Rule 6: We can't use reserved words as identifiers.
Example:
```
int if=10;  --------------invalid
```

Rule 7: **All predefined java class names and interface names we use as identifiers.**
Example 1:

```
class Test
{
public static void main(String[] args){
int String=10;
System.out.println(String);
}}
Output:
10
```

Example 2:

```
class Test
{
public static void main(String[] args){

int Runnable=10;
System.out.println(Runnable);
}}
Output:
10
```

Even though it is legal to use class names and interface names as identifiers but it is not a good programming practice.

Which of the following are valid java identifiers?

1)_$_(valid)
2)Ca$h(valid)
3)Java2share(valid)
4)all@hands(invalid)
5)123abc (invalid)
6)Total# (invalid)
7)Int (valid)
8)Integer(valid)

9)int (invalid)
10) tot123