

3. Check if the input is pangram or not. (Pangram is a sentence that contains all the alphabet from a-z)

3. Ans=> public class PangramStringExample1

```
{
```

```
static int size = 26;
```

```
//function to check if character is a letter or not
```

```
static boolean isLetter(char ch)
```

```
{
```

```
if (!Character.isLetter(ch))
```

```
//returns false if character is not a letter
```

```
return false;
```

```
//returns true if character is a letter
```

```
return true;
```

```
}
```

```
//function to check all the letters (a to z) are presented in the given string or not
```

```
static boolean containsAllLetters(String str, int len)
```

```
{
```

```
//converts the given string into lowercase
```

```
str = str.toLowerCase();
```

```
//creating a boolean array that stores the presence of letters
```

```
boolean[] present = new boolean[size];
```

```
//loop traverse over each character of the string
```

```

for (int i = 0; i < len; i++)

{

//checks if the current character is a letter

if (isLetter(str.charAt(i)))

{

int letter = str.charAt(i) - 'a';

//marks the current letter as present

present[letter] = true;

}

}

//loop iterate over every letter of the given string

for (int i = 0; i < size; i++)

{

if (!present[i])

//returns false if the current character is not presented in the string

return false;

}

//returns true if the current character is presented in the string

return true;

}

//driver Code

```

```
public static void main(String args[])

{

//string to check

String str = "Abcdefghijklmnopqrstuvwxyz";

//determines the length of the given string

int len = str.length();

//function calling

if (containsAllLetters(str, len))

System.out.println("The given string is a pangram string.");

else

System.out.println("The given string is not a pangram string.");

}

}
```