

Program execution with the given binary numbers:

```
Welcome to binary to decimal conversion.

Enter in a binary number to convert: 00101010
Your number converted is: 42

Would you like to enter another binary number (yes/no)? yes
Enter in a binary number to convert: 1110
Your number converted is: 14

Would you like to enter another binary number (yes/no)? yes
Enter in a binary number to convert: 00100101
Your number converted is: 37

Would you like to enter another binary number (yes/no)? yes
Enter in a binary number to convert: 11111111
Your number converted is: 255

Would you like to enter another binary number (yes/no)? nah
That's not a valid response. Try again.

Would you like to enter another binary number (yes/no)? no
Good-bye!

...Program finished with exit code 0
Press ENTER to exit console.
```

Detection of possible error (extra):

```
Welcome to binary to decimal conversion.
```

```
Enter in a binary number to convert: 1111
```

```
Your number converted is: 15
```

```
Would you like to enter another binary number (yes/no)? yes
```

```
Enter in a binary number to convert: 42069
```

```
Your input is not a binary number. Try again.
```

```
Enter in a binary number to convert: 1010010001010101
```

```
Your number converted is: 42069
```

```
Would you like to enter another binary number (yes/no)? no
```

```
Good-bye!
```

```
...Program finished with exit code 0
```

```
Press ENTER to exit console. 
```