

These questions refer to the preliminary material and require you to load the skeleton program, but do not require any additional programming.

MARKS	/50
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1. State the name of an identifier for:

a) A string constant [1]

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b) A subroutine with two parameters [1]

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c) A parameter that is passed by reference [1]

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d) A Boolean variable [1]

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e) A parameter that is an array [1]

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f) An integer array [1]

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g) A library function called from within the `GetMenuOption` subroutine [1]

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h) A parameter passed **out** of the `GetNextLetter` subroutine [1]

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2. State the purpose of each of the following lines in the `GetTransmission` subroutine: [4]

```
Dim Filename As String
...
Filename = Console.ReadLine()
Dim Reader As New StreamReader(Filename)
Transmission = Reader.ReadLine
```

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3. Describe the purpose of the `While` loop within the `SendReceiveMessages` subroutine. [2]

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4. Describe the nature and purpose of the Dash data structure in `SendReceiveMessages`. **[3]**

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5. Look at the subroutine `StripLeadingSpaces`. Describe the purpose and use of the variable `FirstSignal`. **[2]**

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6. Describe each of the following lines of code, taken from the `StripTrailingSpaces` subroutine: **[6]**

```
Dim LastChar As Integer = Transmission.Length() - 1
While Transmission(LastChar) = SPACE
    Transmission = Transmission.Remove(LastChar)
    LastChar -= 1
End While
Return Transmission
```

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7. Describe the function of the following line from the `SendMorseCode` subroutine: **[3]**

```
Index = Asc(PlainTextLetter) - Asc("A") + 1
```

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8. Describe the purpose of the `Catch` block in the `GetTransmission` subroutine.

State one situation in which the code in the `Catch` block would be executed. **[2]**

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9. The skeleton program begins with a number of constants.

State two benefits of the program being written in this way. **[2]**

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10. The `StripLeadingSpaces` subroutine uses the `Substring` operation.

Describe the purpose of the `Substring` operation and explain how it is used in `StripLeadingSpaces`. **[3]**

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11. Describe each of the circumstances that would lead to the subroutine `ReportError` being called. **[5]**

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12. Describe fully the operation of the `Decode` subroutine if the value of `CodedLetter` is `- . . -` **[10]**

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