MATH2504 Semester 2, 2024

Practice Quiz for end of Unit 1

Suggested duration of the quiz: 30 minutes

Q1: Determine the output

```
In [ ]:  s = 30
         for i in 1:3
             s = s - i
         end
         println(s)
```

Answer:

Q2: Determine the output

```
In [ ]:  function add_7(x)
             return x+7
         end

         x = 50
         y = add_7(add_7(add_7(20)))
         println(y)
```

Answer:

Q3: Determine the output

Is it always the same value? Or perhaps just suggest a mean value.

```
In [ ]:  function my_bool_result()
             a = rand(Bool) #A random boolean with 50% chance for false and 50% ch
             b = rand(Bool)
             c = !(a && b)
             d = !a || !b
             return c == d
         end

         s = 0
         for i in 1:1000
             if my_bool_result()
                 s += 1
             end
         end
         println(s)
```

Answer:

Q4: Determine the output

```
In [ ]: parse(Float64, "2.3") == 2.3 || "2.3" == 2.3
```

Answer:

Q5: Write code for a function

The function takes a string `s` and returns the first index where the character `c` appears, or returns `0` if there character is not in the string.

```
In [ ]: function find_first_char_index(s::String, c::Char)

            #.... fill in the function code


        end
```

Answer:

Q6: Determine the value or if it cannot be determined explain why

```
In [ ]: u = rand(1:1000)
        v = rand(1:u)
        q = u ÷ v #\div + [TAB]
        m = u % v
        println(v*q + m == u)
        # What is the output, true, false, or can't tell?
```

Answer: