

# Deploying Lambda Function and Testing with Secrets Manager and Cloud Quest

1

Navigate to [https://us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/application\\_function?tab=code](https://us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/application_function?tab=code)

2

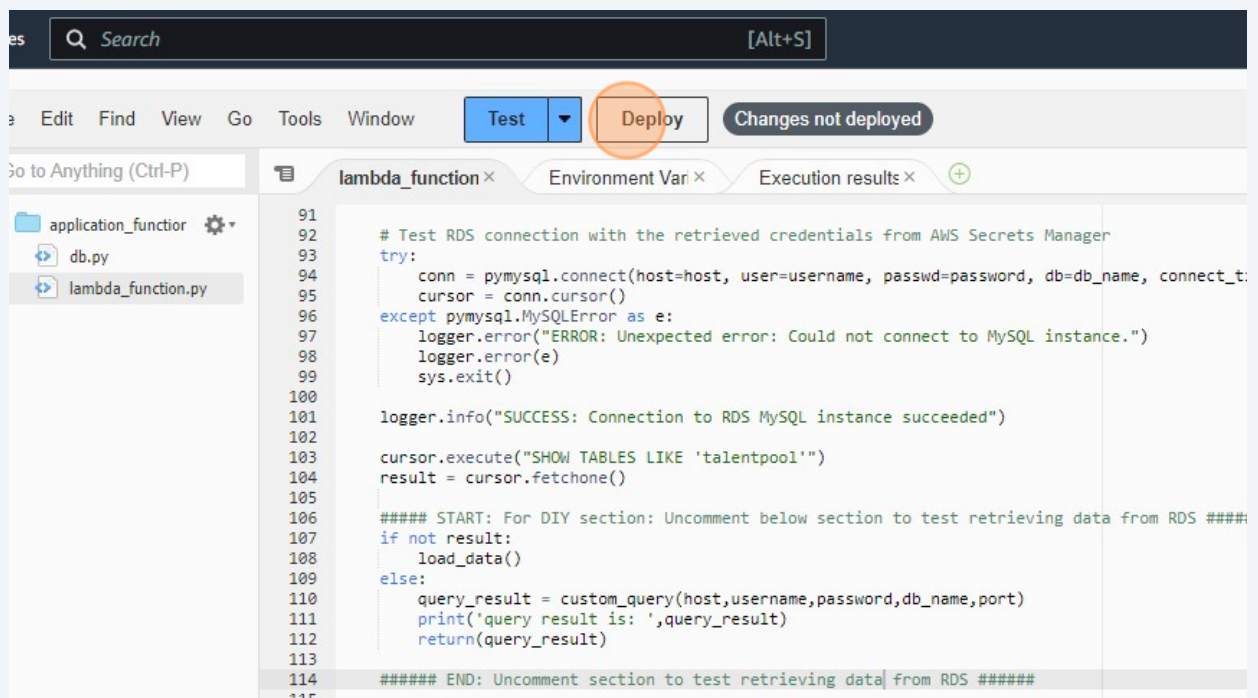
Click here.

```
95     cursor = conn.cursor()
96 except pymysql.MySQLError as e:
97     logger.error("ERROR: Unexpected error: Could not connect to MySQL instance.")
98     logger.error(e)
99     sys.exit()
100
101 logger.info("SUCCESS: Connection to RDS MySQL instance succeeded")
102
103 cursor.execute("SHOW TABLES LIKE 'talentpool'")
104 result = cursor.fetchone()
105
106 ##### START: For DIY section: Uncomment below section to test retrieving data from RDS #####
107 # if not result:
108 #     load_data()
109 # else:
110 #     query_result = custom_query(host,username,password,db_name,port)
111 #     print('query result is: ',query_result)
112 #     return(query_result)
113
114 ##### END: Uncomment section to test retrieving data from RDS #####
115
116 def custom_query(host,username,password,db_name,port):
117
118     custom_sql = """
119         SELECT * FROM talentpool
120         WHERE occupation LIKE 'Toxicologist';
121     """
122
123     custom_query = database.query(custom_sql,host,username,password,db_name,port)
124     logger.info(custom_query)
125     return (custom_query)
126
```

### 3 Click here.

```
97     logger.error("ERROR: Unexpected error: Could not connect to MySQL instance.")
98     logger.error(e)
99     sys.exit()
100
101     logger.info("SUCCESS: Connection to RDS MySQL instance succeeded")
102
103     cursor.execute("SHOW TABLES LIKE 'talentpool'")
104     result = cursor.fetchone()
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116 def custom_query(host,username,password,db_name,port):
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123     custom_query = database.query(custom_sql,host,username,password,db_name,port)
124     logger.info(custom_query)
125     return (custom_query)
126
```

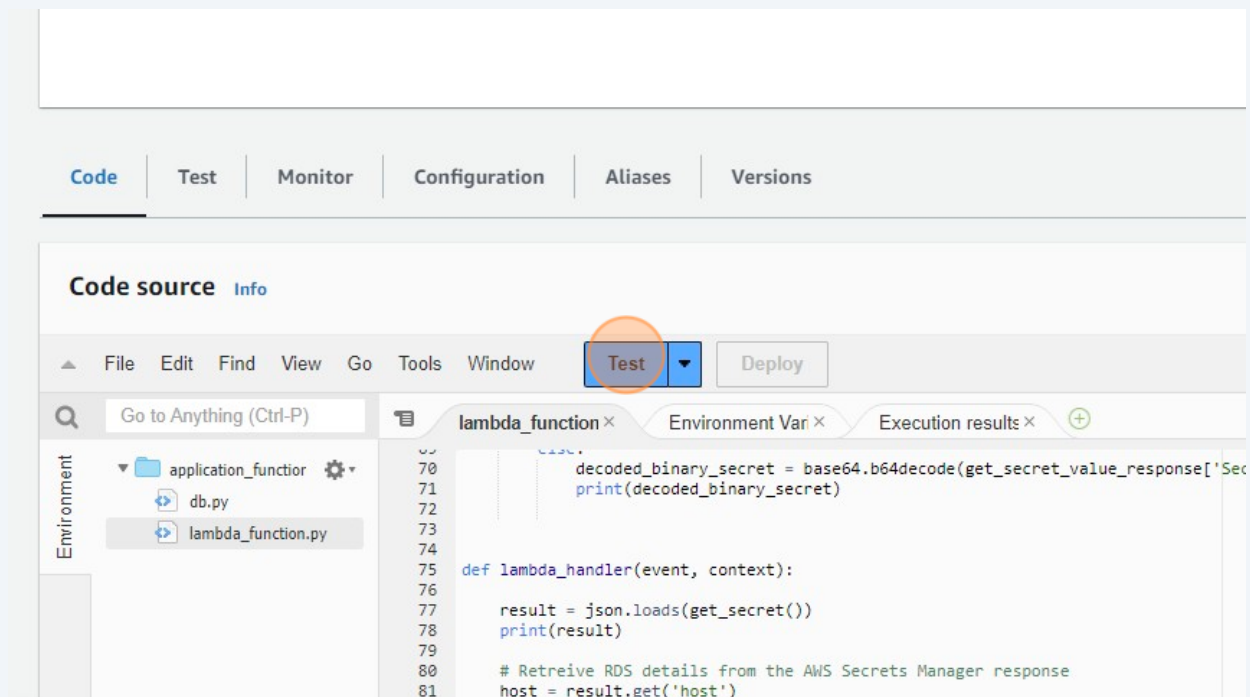
### 4 Click "Deploy"



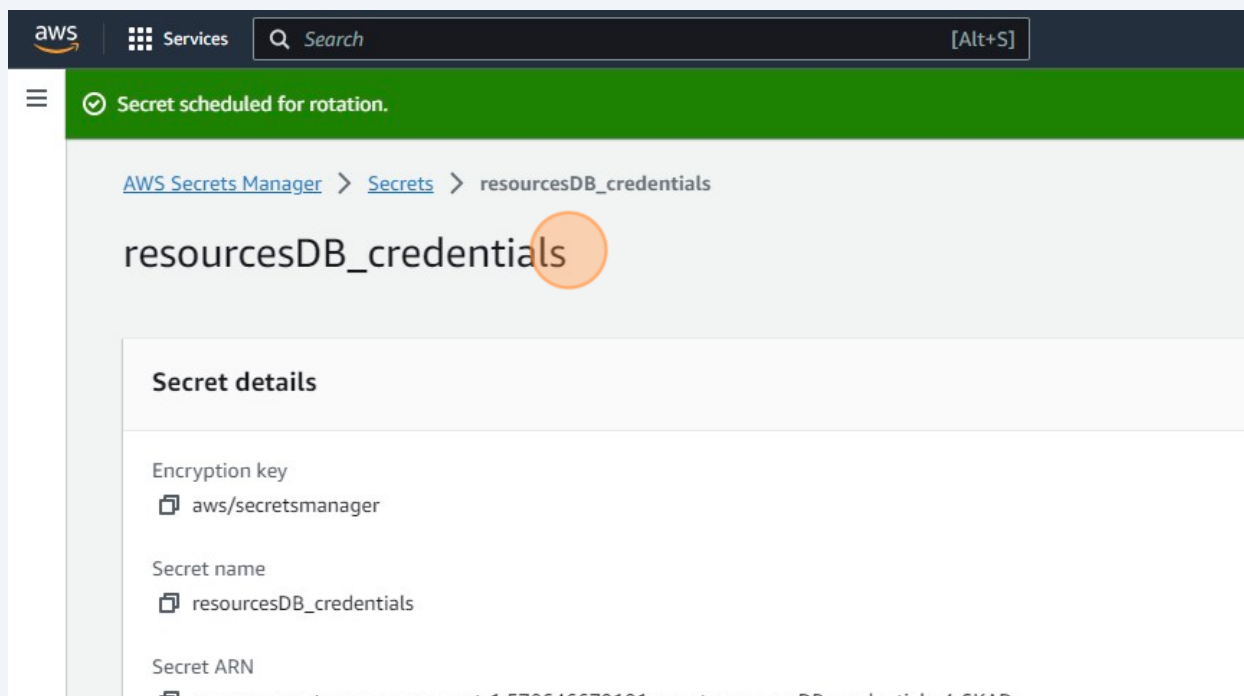
The screenshot shows the AWS Lambda console interface. At the top, there is a search bar and a menu bar with options like 'Edit', 'Find', 'View', 'Go', 'Tools', and 'Window'. Below the menu bar, there are three tabs: 'lambda\_function', 'Environment Var', and 'Execution results'. The 'lambda\_function' tab is active, showing a code editor with Python code. The code is the same as in the previous block, but with some additional comments and a try-except block for the database connection. The 'Deploy' button is highlighted with an orange circle, and a 'Changes not deployed' status is visible next to it. The code editor shows lines 91 through 115, which correspond to the code in the previous block.

```
91 # Test RDS connection with the retrieved credentials from AWS Secrets Manager
92 try:
93     conn = pymysql.connect(host=host, user=username, passwd=password, db=db_name, connect_t:
94     cursor = conn.cursor()
95 except pymysql.MySQLError as e:
96     logger.error("ERROR: Unexpected error: Could not connect to MySQL instance.")
97     logger.error(e)
98     sys.exit()
99
100 logger.info("SUCCESS: Connection to RDS MySQL instance succeeded")
101
102 cursor.execute("SHOW TABLES LIKE 'talentpool'")
103 result = cursor.fetchone()
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105 ##### START: For DIY section: Uncomment below section to test retrieving data from RDS #####
106 if not result:
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109     query_result = custom_query(host,username,password,db_name,port)
110     print('query result is: ',query_result)
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112
113 ##### END: Uncomment section to test retrieving data from RDS #####
114
115
```

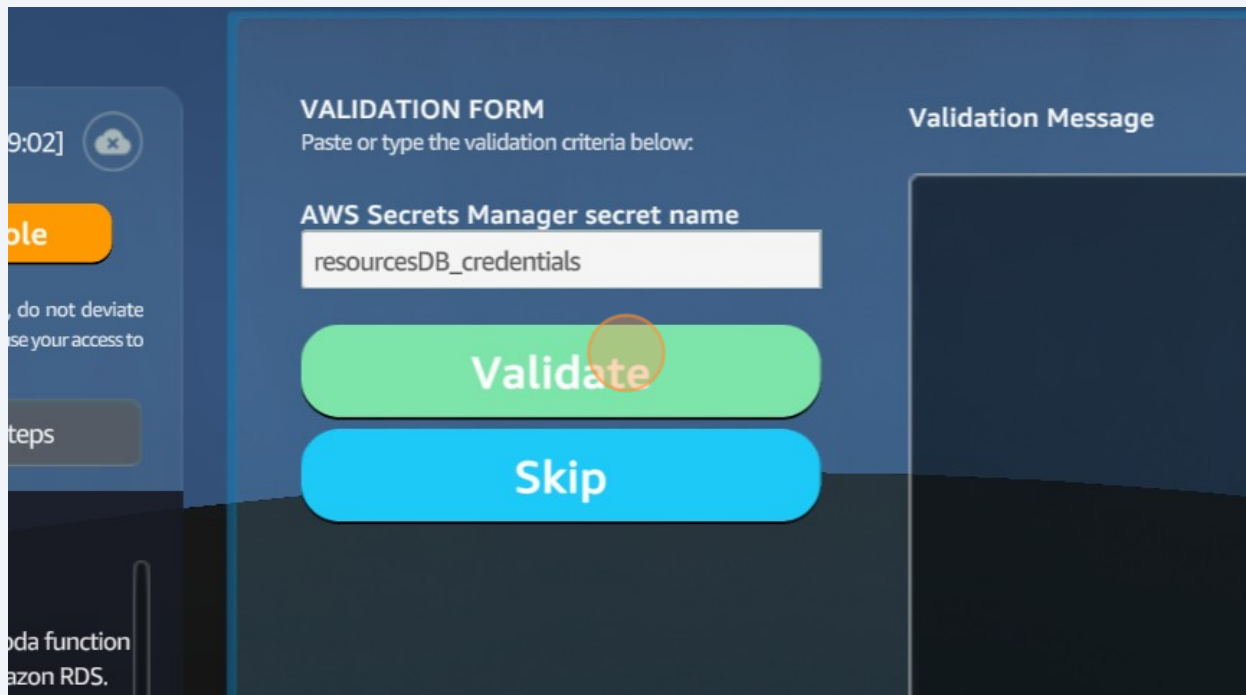
5 Click "Test"



6 Click here.



7 Click here.



A screenshot of a web application interface. On the left, there is a sidebar with a clock showing '9:02', a cloud icon, and some text including 'do not deviate' and 'your access to'. The main area is titled 'VALIDATION FORM' and contains the instruction 'Paste or type the validation criteria below:'. Below this, there is a text input field labeled 'AWS Secrets Manager secret name' containing the text 'resourcesDB\_credentials'. Below the input field are two buttons: a green 'Validate' button and a blue 'Skip' button. The 'Validate' button is highlighted with a red circle. To the right of the buttons is a section titled 'Validation Message' which is currently empty.

8 Double-click here.

