EXAMPLE_WALKTHROUGH

The program uses numbers to select options.

1. Enter type of flow.

```
>> HYDRAULICS_CODE

Flow type:
1. GRADUALLY VARYING FLOW.
2. NORMAL FLOW.
3. RAPIDLY VARYING FLOW.
Enter the number corresponding to the type of flow: 2
WHAT IS THE SHAPE OF THE CHANNEL:
1. RECTANGLE.
2. TRIANGLE.
3. TRAPEZIUM.
4. CIRCLE.
5. COMPOSITE SHAPE.
Enter the number corresponding to the type of flow:
```

2. Enter the conditions specific to that flow.

```
>> HYDRAULICS_CODE

Flow type:
1. GRADUALLY VARYING FLOW.
2. NORMAL FLOW.
3. RAPIDLY VARYING FLOW.
Enter the number corresponding to the type of flow: 2
WHAT IS THE SHAPE OF THE CHANNEL:
1. RECTANGLE.
2. TRIANGLE.
3. TRAPEZIUM.
4. CIRCLE.
5. COMPOSITE SHAPE.
Enter the number corresponding to the type of flow: 1
Enter the discharge:2
Enter manning's number:0.00179
Enter the streamline slope:2/1000
Enter the channel width:1.5
```

3. Visualisation of the results.

```
>> HYDRAULICS_CODE

Flow type:
1. GRADUALLY VARYING FLOW.
2. NORMAL FLOW.
3. RAPIDLY VARYING FLOW.
Enter the number corresponding to the type of flow: 2
WHAT IS THE SHAPE OF THE CHANNEL:
1. RECTANGLE.
2. TRIANGLE.
3. TRAPEZIUM.
4. CIRCLE.
5. COMPOSITE SHAPE.
Enter the number corresponding to the type of flow: 1
Enter the discharge:2
Enter manning's number:0.00179
Enter the streamline slope:2/1000
Enter the channel width:1.5
The normal depth is 0.188502.
Froude's number is 5.20153.
The critical depth is 0.565895.
The critical slope is 8.04161e-05.
The specific energy is 0.848843.
The normal depth is subcritical.
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