INCREASING TRIPLET SUBSEQUENCE

```python
def increasetriplet(nums):
  first = float('inf')
  second = float('inf')
  for num in nums:
    if num <= first:
      first = num
    elif num <= second:
      second = num
    else:
      return True
  return False

nums = [10, 2, 4, 5]
print(increasetriplet(nums))
```