## **Task - 3 Python Programming (Solution)**

Name: B. Vijay Kumar Batch: 20th September @ HexSoftwares Internship Role: Python Programming

## **Memory Puzzle Game**

Implement a simple memory puzzle game where users match pairs of cards.

Use Tkinter to build a grid of buttons with randomized numbers to match.

## Code (Python):

```
import tkinter as tk, random
from functools import partial
class MemoryGame:
   def __init__(self,
root):
        self.root=root; self.buttons={}; self.first=None; self.values=list(range(1,9))*2;
random.shuffle(self.values)
       self.create()
   def create(self):
       for i in range(16):
b=tk.Button(self.root,text=' ',width=5,height=2,command=partial(self.reveal,i));
b.grid(row=i//4,column=i%4); self.buttons[i]=b
   def reveal(self,i):
self.buttons[i].config(text=self.values[i])
        if self.first is None: self.first=i
else:
            if self.values[self.first]!=self.values[i]:
self.root.after(500,lambda:(self.buttons[self.first].config(text=' '),self.buttons[i].config(text='
')))
            self.first=None
root=tk.Tk();MemoryGame(root);root.mainloop()
```

Can be extended with timer, score, or images for better UX.