

Q.16) Write a menu driven program to implement the following

i)check even or odd

ii)check number is positive negative or zero

iii) generate factors of a number

```
def evenorodd_check(number):
```

```
    if num % 2 == 0:
```

```
        return f"{num} is Even"
```

```
    else:
```

```
        return f"{num} is Odd"
```

```
def sign(num):
```

```
    if num > 0:
```

```
        return f"{num} is Positive"
```

```
    elif num < 0:
```

```
        return f"{num} is Negative"
```

```
    else:
```

```
        return "The number is Zero"
```

```
def factors(num):
```

```
    factor = []
```

```
    for i in range(1, num + 1):
```

```
        if num % i == 0:
```

```
            factor.append(i)
```

```
    return factor
```

```
def Menu():
```

while True:

```
print("\nMenu:")
print("1. Check if the number is Even or Odd")
print("2. Check if the number is Positive, Negative or Zero")
print("3. Generate factors of a number")
print("4. Exit")
```

```
Choice = input("Enter your choice (1/2/3/4): ")
```

```
if Choice == '1':
    number = int(input("Enter a number: "))
    print(evenorodd_check(num))
```

```
elif Choice == '2':
    num = int(input("Enter a number: "))
    print(sign(num))
```

```
elif Choice == '3':
    num = int(input("Enter a number: "))
    factor = factors(num)
    print(f"The factors of {num} are: {', '.join(map(str, factor))}")
```

```
elif Choice == '4':
    print("Exiting program...")
    break
```

```
else:
    print("Invalid choice, please try again.")
```

```
Menu()
```