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# Dokumentasaun Programa Validasaun Regex

## 1. Deskrisaun Programa

Programa ne’e valida **email** no **numeru telefone** uza **Regular Expressions (Regex)**. Programa suporta **modo interaktiv** no **argumentos command-line**.

## 2. Requisitos

* Python 3.x
* Modul bawaan Python: re, argparse

## 3. Struktura Programa

### 3.1 Identidade Programa

print("====================================")  
print(" Programa Validasaun Regex")  
print(" Autor : Maria mendosa")  
print("====================================\n")

### 3.2 Regex Patterns

EMAIL\_RE = re.compile(r'^[\w\.-]+@[\w\.-]+\.\w{2,}$') # Pattern ba email  
PHONE\_RE = re.compile(r'^\+?\d{7,15}$') # Pattern geral ba telefone  
PHONE\_TL = re.compile(r'^(\+670|670)?7\d{6,7}$') # Pattern telefone TL

### 3.3 Funsaun Validasaun Email

def valida\_email(email: str) -> bool:  
 return bool(EMAIL\_RE.match(email.strip()))

* Retorn True se email valida, False se la valida.

### 3.4 Funsaun Validasaun Telefone

def valida\_phone(phone: str) -> bool:  
 phone = re.sub(r'[\s\-\(\)]', '', phone)  
 return bool(PHONE\_RE.match(phone) or PHONE\_TL.match(phone))

* Hamoos númeru telefone husi espasu, sinál menus (-), no parénteze
* # Objetivu maka atu asegura katak númeru ne'e kontein de'it díjitu sira no sinál + (se iha), atu nune'e regex bele valida ho loloos.
* , ka parenthesis.
* Retorna True se telefone valida.

### 3.5 Modu Interaktiv

def interactive\_mode():  
 print("Modo interaktiv — valida email ou nomor telefone")  
 while True:  
 choice = input("\nHili (e=email, p=phone, q=quit): ").lower()  
 if choice == "q":  
 print("Sai...")  
 break  
 if choice == "e":  
 e = input("Hatama email: ")  
 print("VALID" if valida\_email(e) else "INVALID")  
 elif choice == "p":  
 p = input("Hatama telefone: ")  
 print("VALID" if valida\_phone(p) else "INVALID")

* Seksaun ida-ne'e maneja interasaun direta ho utilizadór.
* Utilizadór sira bele hatama enderesu email ka númeru telefone manualmente.
* Opsaun sira menu nian:
* e → validasaun email
* p → validasaun telefone
* q → sai hosi modo interativu
* Rezultadu validasaun nian hatudu kedas: VÁLIDU ka INVÁLIDU

### 3.6 Funsaun Prinsipal

def main():  
 parser = argparse.ArgumentParser(add\_help=False)  
 parser.add\_argument("--email")  
 parser.add\_argument("--phone")  
 parser.add\_argument("--interactive", action="store\_true")  
 args, \_ = parser.parse\_known\_args()  
  
 if not any([args.email, args.phone, args.interactive]):  
 interactive\_mode()  
 return  
  
 if args.interactive:  
 interactive\_mode()  
 if args.email:  
 print("Email:", "VALID" if valida\_email(args.email) else "INVALID")  
 if args.phone:  
 print("Phone:", "VALID" if valida\_phone(args.phone) else "INVALID")

### 3.7 Entry Point

if \_\_name\_\_ == "\_\_main\_\_":  
 main()

* Programa sempre mulai husi main().

## 4. Uzu Programa

### 4.1 Mode Command-Line

* Validasaun email:

python validasaun.py --email "usuario@example.com"

* Validasaun telefone:

python validasaun.py --phone "+67077712345"

* Mode interaktiv:

python validasaun.py --interactive

### 4.2 Mode Interaktivu

* Run code python validasaun.py sem no argumento → menu interaktivu
* menu:
  + e → Hatama email
  + p → Hatama nomor telefone
  + q → Sai programa

## 5. Output program

* Se email/no telefone valida → VALID
* Se la valida → INVALID

## 6. Observasaun

* Programa suportadu iha Windows no Linux.