

## Python String Programs

### Program: string1.py

*Question: 1. Write a program to remove all vowels from a string.*

```
s = str(input("Enter a string : "))
result = ""

result += "".join((ch for ch in s if ch not in "aeiouAEIOU"))
print(f"Result : {result}")

# Enter a string : aeioWyk
# Result : Wyk
```

## Program: string2.py

*Question: 2. Write a program to remove characters at odd index positions from a string.*

```
s = str(input("Enter a string : "))
result = "".join(s[i] for i in range(len(s)) if i%2==0)
print(result)

# Enter a string : anandhu
# aadu
```

## Program: string3.py

*Question: 3. Check whether a string is palindrome or not.*

```
s = str(input("Enter a string : "))
```

```
if s==s[::-1]:  
    print("palindrome")  
else:  
    print("not a palindrome")
```

```
# Enter a string : malayalam
```

```
# palindrome
```

## Program: string4.py

*Question: 4. Write a program to replace all the spaces in the input string with \* or if no spaces found, put \$ at the start and end of string.*

```
s = str(input("Enter a string : "))
result = ""
if " " in s: # if s.find(" ") != -1:    ;it gives the first index of the space
    result = s.replace(" ", "*")
else:
    result = "$" + s + "$"

print(result)

# Enter a string : python lab
# python*lab

# Enter a string : python
# $python$
```

## Program: string5.py

*Question: 5. Write a program to slice string into two separate strings; one with all the characters in the odd indices and one with all characters in even indices.*

```
s = str(input("Enter a string : "))

string1 = s[0::2]
string2 = s[1::2]

print(string1,"string at even index.")
print(string2,"string at odd index.")

# Enter a string : anandhu
# aadu string at even index.
# nnh string at odd index.
```

## Program: string6.py

*Question: 6. Write a program to remove all occurrence of a substring from a string.*

```
s = str(input("Enter a string : "))
substring = str(input("Enter a substring : "))

result = s.replace(substring,"")
print(result)

# Enter a string : nano banana
# Enter a substring : na
# no ba
```

## Program: string7.py

*Question: 7. Write a program to convert all lowercase into uppercase.*

```
s = str(input("Enter a string : "))  
print(s.upper())
```

```
# Enter a string : anandhu  
# ANANDHU
```

## Program: string8.py

*Question: 8. Write a program to reverse first and second half of a string separately.*

```
s = str(input("Enter a string : "))
length = len(s)
result = s[:length//2][::-1] + s[length//2:][::-1]
print(result)
```

```
# Enter a string : anandu
# anaudn
```



## Program: string9.py

*Question: 9. Write a program to replace all occurrence of a substring with a new substring.*

```
s = str(input("Enter a string : "))
substring = str(input("Enter a substring : "))
new_substring = str(input("Enter a new substring : "))
```

```
new_string = s.replace(substring,new_substring)
print(new_string)
```

```
# Enter a string : Anandhu
# Enter a substring : Anan
# Enter a new substring : Nan
# Nandhu
```

## Program: string10.py

*Question: 10. Write a python program to check validity of password given by user.*

*Password should satisfy following criteria :-*

- *Contains atleast one letter between 'a' and 'z'.*
- *Contains atleast one number between 0 and 9.*
- *Contains atleast one letter between A and Z.*
- *Contains atleast one special character from \$, #, @*
- *Minimum length of password : 6*

```
# Write a python program to check
# validity of password given by user.
# Password should satisfy following criteria :-

# Contains atleast one letter between
# 'a' and 'z'.

# Contains atleast one number between
# 0 and 9.

# Contains atleast one letter between
# A and Z.

# Contains atleast one special character
# from $, #, @
# Minimum length of password : 6

s = str(input("Enter a password : "))

has_digit = False
has_special = False
has_upper = False
has_lower = False

for ch in s:
    if ch.isdigit():
        has_digit = True
    elif ch.islower():
        has_lower = True
    elif ch.isupper():
        has_upper = True
    elif ch in "$#@":
        has_special = True

if len(s) < 6:
    print("Minimum length of password : 6")
elif not has_lower:
    print("Contains atleast one letter between 'a' and 'z'.")
elif not has_digit:
    print("Contains atleast one number between 0 and 9.")
elif not has_upper:
    print("Contains atleast one letter between A and Z.")
elif not has_special:
```

```
    print("Contains atleast one special character from $, #, @")
else:
    print("Password is valid")
```